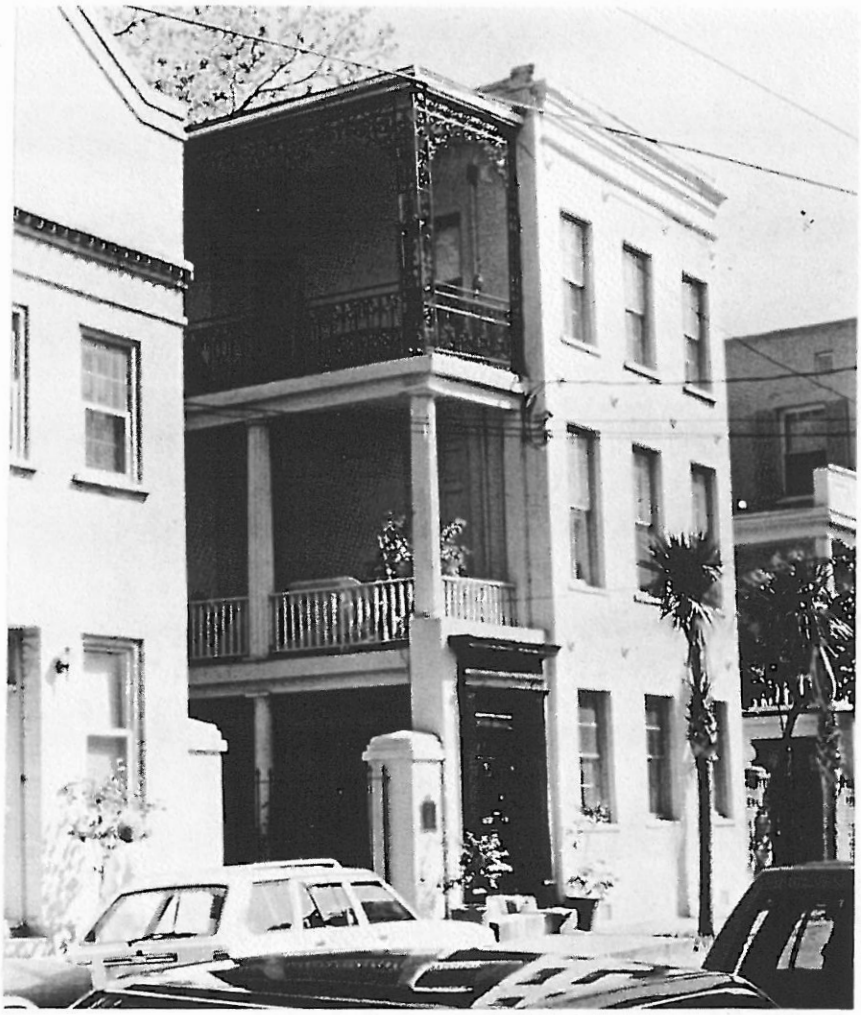
CHARLESTON'S FIRST SUBURB:
Excavations at 66 Society Street



The Charleston Museum
Archaeological Contributions 20

CHARLESTON'S FIRST SUBURB:

EXCAVATIONS AT 66 SOCIETY STREET

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Thanks are also due the staff of The Charleston Museum for their assistance and support. Thanks to Dr. John Brumgardt, Director, and Mr. Samuel Jones, Assistant Director, for their support. Thanks also to Faith Brownlee and Edith Pinckney for keeping the books straight. And thank you, Jo Fetzer, for darkroom assistance.

Fortunately for us, archaeology is a discipline that interests many people, and a few dedicated folks contribute volunteer time to various projects. At the Museum, we are fortunate to work on projects with a number of dedicated people, and the 66 Society project was no exception. We accomplished this short, but important project with the help of several volunteers; Bob Jacobs, Harriett Goldenberg, and Myrna Rowland.

This report is dedicated to Jerry Goldenberg, whose superb lunches made the project part of archaeological history. These culinary delights have been described in detail to our colleagues at many conferences, making them wish for such fine associates. Thanks, Jerry!

CHAPTER I

INTRODUCTION

In April 1987, Mr. James Werrell planned to construct a swimming pool in his yard at 66 Society Street. As construction was imminent (heavy equipment was already at the site), Historic Charleston Foundation learned of the project. The Foundation, who purchased the property for resale in 1960, holds protective covenants on the property and was concerned about impacts to the archaeological record. They contacted The Charleston Museum archaeological staff, who visited the site. After surface collecting and examining a small sample trench excavated by backhoe, the archaeologists determined that the site contained significant resources worthy of investigation.

The result of discussions between the archaeologists, Historic Charleston Foundation staff, Mr. Werrell, and the pool construction crew, was that controlled archaeological excavations would be conducted prior to further construction activity. Because of the size of the area to be impacted, the imminence of construction, and the limited availability of time and funds, it was determined that excavations would be limited to three days, with an appropriate amount of time for analysis and writing.

A small but significant sample was retrieved from these excavations. The historic neighborhood of Ansonborough has long been a focus of the Foundation's preservation efforts, but the program of the 1960s and 1970s concentrated on the above-ground resources. The present project is the first controlled excavation in the city's oldest suburb. Further, this is one of a few samples from a presumed middle class residential site; such samples are important in expanding the archaeological data base and presenting a balanced view of Charleston's heritage.

Background

The area bounded by King, Wentworth, Anson, and Calhoun, known as Ansonborough, was the first suburban development of the expanding eighteenth century port city. The 66 Society site is part of a portion of Ansonborough purchased by the South Carolina Society for speculation. The present house was built by William T. Hieronymous after the tremendous fire of 1838. Hieronymous, part owner of livery stables on Church street, defaulted on payments in 1847. The house was purchased by Martha Roper, a wealthy planter and granddaughter of Henry Laurens. She evidently renovated and rented the house, and the practice was continued by subsequent owners. In 1960, Historic Charleston Foundation purchased the house to preserve it.

Avenues of Archaeological Inquiry

The development of archaeology in Charleston parallels the development of urban archaeology in much of the country. Investigations began with a few small-scale, isolated projects, including artifact studies (Singleton 1982, 1984; Herold 1981b), long-term site-specific research (Herold 1978), and federally-funded mitigation projects (Herold 1981a; Honerkamp et al. 1982). Subsequent investigations became more focused with the initiation of a city-wide archival survey. This two year project, initiated in 1981, examined historical documents relevant to several archaeological issues, explored general trends in city demographics, and presented an overview of the growth and development of the port. The overriding goal was to develop long-term research goals and to make recommendations to the city concerning the preservation and exploration of the archaeological record.

During and after completion of the archival survey, several excavations were conducted in the city, all of them located within the original boundaries of the Grand Model (Figure 1). These studies have explored a number of issues, both descriptive and processual. Urban archaeology is a relatively recent field of inquiry, and it is therefore necessary to explore such formative issues as site formation processes, site function, artifact patterning, and lot element patterning.

While such research is continuing, data from these sites are also used to investigate processual issues of human behavior. The adaptive issues include investigation of social and ethnic variability, subsistence strategies, and spatial patterning. Other investigations include adaptation to the urban environment, the shift from private to public management of basic needs, rural-urban contrasts, and the role of the city in the regional social and economic milieu. The 66 Society data were appropriate for the investigation of several of these issues.

1) Establishing Temporal Parameters of the Site - An essential first step in any archaeological investigation is to establish the presence of archaeological resources and evaluate their condition. When coherent, physical evidence of human behavior is present, chronological characteristics of the archaeological assemblages must then be discerned. Documentary evidence of the 66 Society site suggests the presence of at least one dwelling on site prior to the house currently standing. Terminus Post Quem and stratigraphic point of initiation are used to determine a date of deposition for each provenience and to establish the temporal parameters of site occupation.

2) Site Formation Processes - In order to properly interpret an archaeological site, it is first important to understand the processes responsible for the formation of that record (Schiffer 1977). An archaeological site consists of a natural setting altered by the humans who occupied that site. Specifically of interest are those activities which introduce materials into the

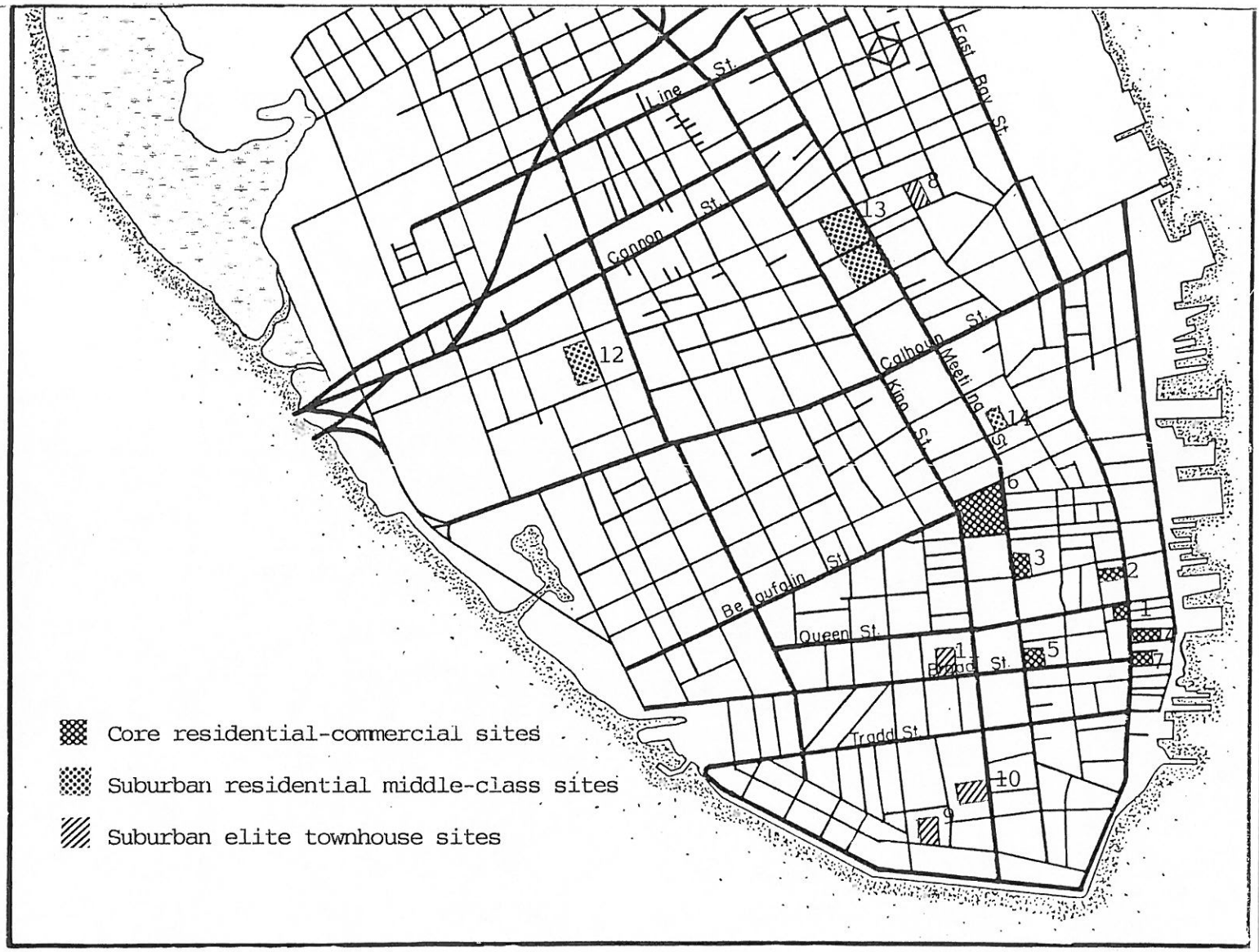


Figure 1: Location of Sites Excavated in Charleston. 66 Society is #14.
1) McCrady's Longroom, 2) Lodge Alley, 3) First Trident, 4) Atlantic Wharf, 5) Beef Market, 6) Charleston Place, 7) Exchange Building, 8) Aiken-Rhett, 9) Gibbes House, 10) Miles Brewton House, 11) John Rutledge House, 12) President Street, 13) Visitor's Center, 14) 66 Society.

ground. The urban site is often a complex combination of such events. Site formation processes on suburban sites are expected to be different from those in the densely occupied commercial core.

3) Artifact Patterning and Site Function - Most of the sites investigated within the older city have been combined residential-commercial establishments. Research on these sites has focused on delineating site function (Honerkamp et al. 1982; Lewis 1977). Investigation in the suburban areas should complement this study by acting as a control; the majority of such sites, including 66 Society, functioned only as domestic units. The artifact patterns from 66 Society will be compared to these sites in order to strengthen the dual function model.

4) Socioeconomic Status - A recent focus of historical archaeology in general, and urban studies in particular, has been the delineation of socioeconomic status (Cressey et al. 1982; Spencer-Wood 1987; Orser 1988). Using the documentary record as a control, the socially stratified urban center can serve as an appropriate data base for recognizing socioeconomic status and consumer choices in the archaeological record. Investigation of less complex, more thoroughly documented antebellum suburban sites has resulted in the identification of correlates between socioeconomic status and material culture in Charleston (Zierden and Grimes 1988; Zierden et al. 1986b; 1987).

5) Spatial Patterning - Spatial patterning (the arrangement of buildings, activity areas, and open spaces over the urban landscape) in the suburban areas was quite different from that in the constricted commercial core, and is reflected in both individual site and neighborhood patterns. Exploration of suburban areas provides a more complete picture of the growth and development of the city and on the use of urban space (Geismar 1985; Mrozowski 1987; Rothschild 1985, 1987).

6) Subsistence Strategies - Increasing attention is focusing on the study of subsistence strategies in historic populations, using faunal and botanical remains recovered from historic sites (Reitz and Scarry 1985; Zierden and Trinkley 1984). These remains have been used to address a variety of questions concerning historic subsistence strategies, including cultural conservatism, adaptation to local environments, ethnicity, and social variability. Faunal and botanical remains, recovered and examined in a consistent manner from Charleston sites, have resulted in the formation of several dietary models; samples from suburban sites are an important addition to this data base.

CHAPTER II

THE DOCUMENTARY EVIDENCE

A group of patriotic and profit seeking English noblemen founded the Carolina colony in 1670. In 1680, the Lords Proprietors relocated their first town from a marshy area on Albemarle Point to the more defensible and commercially suitable peninsula formed by the confluence of the Ashley and Cooper rivers (Earle and Hoffman 1977). Here the English settled the area along the Cooper River bounded by present day Water, East Bay, Cumberland, and Meeting streets. The planned city, known as the Grand Model, was laid out around a central square and divided by wide streets into deep, narrow lots, a plan characteristic of seventeenth century Irish towns colonized by the British (Reps 1965). While the new Charles Town was a renaissance city in many ways, the surrounding wall and steep roofs gave it a decidedly medieval atmosphere (Coclanis 1984).

As colonists searched for profitable staple crops, the settlement developed gradually as a port and marketing center. An initially successful Indian trade in deer skins provided the impetus for Charles Town's commercial growth. The decade of the 1730s witnessed the town's transformation from a small frontier community to an important mercantile center. When royal rule replaced the inefficient proprietary governmnent in 1729, following a revolt by the settlers, Carolina entered the mainstream of the colonial economy (Lewis 1984). The development of outlying settlements, following the Township Plan of 1730, brought an influx of products from the backcountry. Meanwhile, as rice became more profitable, Lowcountry plantations rapidly expanded. Thousands of Africans were imported as a labor force, and merchants grew rich dealing in staples and slaves. Merchants and planters formed the elite of Charleston society; indeed, the two groups often overlapped, for planters engaged in mercantile endeavors, and merchants invested their earnings in land, becoming planters themselves. This strong tie to the country is an important theme in the city's history (Goldfield 1982).

As the eighteenth century advanced, Charles Town expanded in size, economic importance, and the relative affluence of its citizens. White per capita income was among the highest in the colonies (Weir 1983). Still, the city limit remained at Beaufain Street until 1783 (Figure 2), when it was moved four blocks north to Boundary Street. Within these confines, a growing population was accommodated by subdividing lots and expanding into the center of blocks. The city was oriented on an east-west axis. Charleston's merchants and craftspeople lined the waterfront and three streets; Broad, Tradd, and Elliot, which carried traffic west across the peninsula (Calhoun et al. 1985). Like other eighteenth century cities, Charleston was a pedestrian town. Merchants needed to be near the waterfront for the sake of


REFERENCE'S
to the Streets Lanes &c with the width of each in Feet & Inches
1 East Bay from Sommers to Governors Bridge 66.—
2 Dº continued from Ellery S.to Guignard S. 22 F. to Pinckney S. 28 Feet to Hasell S. 22
3 So Be It Lane 30.—
4 South Bay 50.—
5 Stoll's Alley at Bay 5 F. at Church S. 8 9
6 Longitude Lane at Bay 10 F. at Church S. 7 6
7 Tradd S. at Bay 30 F. at Church S. 28 F. at Meeting S. 32 at King S. 30 F.
8 Bedons Alley 19.—
9 Inglis's Arch at Bedons Alley 7½ F. at the Arch 5.—
10 Elliott S. at Church S. 29 Feet at Bay 18 3
11 Gadsdens Alley 8 10
12 Broad S. at Bay 61 SE. at Meet.g S. 66 F. at King S. between St Mich.l Church & Beef Market 300 F. 61.—
13 Union S. 20.—
14 Dº continued 20.—
15 Chalmers Alley 11.—
16 Unity Alley 10.—
17 Queen S. at Bay 78 F. at Church S. 32 & at Meeting S. 35 at Kings S. 36 Feet
18 Kinloch's Court 12.—
19 Ledge Alley 10.—
20 Waggs Alley 19 F. at Bay, 20 Feet at Church
21 Church S. at Queen S. 40 F. at City Tavern 60 F. S. Side Broad S. 44 F. at Tradd S. 43 F. 10 Inches
22 Dº continued 23.—
23 Name unknown 35.—
24 Lynch Lane 12.—
25 Water S. 29.—
26 Kepe Lane 7.6
27 St Michaels Alley 10.—
28 Market Square at Meeting S. 83 F. at Broad S. 26.—
29 Beresford Alley at Meeting S. 20 at Church S. 23.6
30 Cumberland S. 22.—
31 Ellery Sr. 20.—
32 Maiden Lane 19.—
33 French Alley 12.—
34 Charles S. 28.—
35 Name unknown 20.—
36 Guignard S. 20.—
37 Name unknown 7.6
38 Pinckney S. 30.—
39 Quence S. 29 F. 40 Anson S. 19.—
41 Scarborough S. 20.—
42 Name unknown at Pinckney S. 28 F. at North End 20.—
43 Hassell S. 40 F. 44 Trott S. 40 F. 45 Cumberland S. 29.6
46 Society S. 40.—
47 George S. from Scarborough to King S. 29 F. W. Side D.º 34 F. at St Phillips S. 27 F. at end by the Barracks 53 F.
48 Meeting S. at St Bay 60 F. at Tradd S. 64 F. between St Michaels Church & Treasury 56 F. between State House & Market 68 F. at Queens S. 67 F. from Elbow by Broad S. to Sqarell S. 68 F.
49 Sqarell S. 44 F. 50 Smiths Lane 15 F. 51 Wans Court 19.—
52 Price Alley at King S. 20 F. at Meeting S. 22 F. 22.—
53 State House Square at Broad S. 37 F. at Meeting S. 19.—
54 Moore S. at King S. 18 F. at Meeting S. 20.—
55 Federal S. 20 F. 56 Name unknown at King S. 15.—
57 Boundary S. extent of the City North side 45.—
58 King S. at South Bay 32½ F. at Tradd S. 34 F. at Broad S. 34 F. at Queen S. 34 F. at Elbow 35 F. at Boundary S.
59 Lambell S. at King S. 16 F. Narrow part 10 F. at Logan S. 35.—
60 Logan S. 20 F. & Gibbes S. 33 F. to Friend S. 19.6
63 Orange S. 21.—
REFERENCE'S
to the Streets Lanes &c continued
64 Mazyck S. at Broad S. 17 44 F. from Queen to Beaufain S. 20.—
65 Short S. 20 F. 66 Allen S. at Broad S. 19 F. at Queen S. 33.—
67 Archdale S. 23 F. 68 Magazine S. 16 F. 69 West S. 10.—
70 Bristle Alley at Archdale S. 8 F. at King S. 7.—
71 Dutch Church Alley 13 F. 72 Beresford S. 25.—
73 Beaufain S. at Mazyck S. 16 F. at King S. 31.6
74 Cummins S. Width unknown West side belonging to Harleston not laid out
75 Saint Philips S. 40.—
76 Wentworth S. to King S. 46 F. by Cummins S. 50.—
77 Liberty S. 30.—
Names of the Wharfs
78 Gibbs Wharf
79 Russell Dº
80 St Kenzie Dº
81 Kepas Dº
82 Eveleighs Dº
83 Vandelhorsts Dº
84 Germains Dº
85 Market Dock
86 Motties Wharf
87 Greenwoods Dº
88 Beals Dº
89 Champneys Wharf
90 Jervois Dº
91 Cochrans Dº
92 Pinckneys Dº
93 Gullions Dº
94 Vandelhorst Dº
95 Shrewsburys Dº
96 Munros Dº
97 Mays Dº
98 Laurens Dº
99 Gadsdens Dº
NAMES of PUBLIC BUILDINGS
A New Baptist Church
B Old Dº Dº
C Presbyterian Dº
D Guard House
E Treasury, & Auditore Generals Office
F St Michaels Episcopal Church,
G Formerly State House now Court House &c.
H Beef Market
I Low Market
K Exchange
L Fish Market
M French Church
N St Philips Episcopal Church
O Old Independent Dº
P Methodist Dº
Q Quaker Dº
R New Independent Dº
S German Dº
T Jews Synagogue
X Distillerys
U Governors Burston
W Romish Church
X Brew House
Y the Brick Houses colored thus
the Wood Dº Dº
R
35 Public Wells marked thus •
9 Fire Engine belonging to the City
NB There are private Wells in general throughout the City
HARLESTON
ASHLEY RIVER
COOPER RIVER
PROTECTION
ICHNOGRAPHY OF CHARLESTON,
South Carolina,
At the Request of Gedam Sunne Esq. For the use of the
PHŒNIX FIRE-COMPANY OF LONDON,
Taken from Actual Survey 2d August 1788 by
Edmund Petrie
SCALE
400 Feet to one Inch
Published 5 Jan. 1790 by E. Fitter No. 13 Austin Square.

Figure 2

convenience as well as for economy of transportation. Hence the area known as Charleston Neck, north of the city proper, was slow to develop.

The earliest subdivision venture was undertaken by Captain George Anson in 1747 (Figure 3). The area bounded by Calhoun, King, Wentworth, and Anson streets was part of a 90 acre grant to Isaac Mazyck in 1696. Sixty-three acres were sold to Col. Edward Tynte, then Governor of Carolina. Tynte soon reconveyed the land back to Mazyck. In 1720 Mazyck and his wife Marianna conveyed the land to Thomas Gadsden, 63 acres with adjoining marshlands. Gadsden in 1726 sold a portion of this land to Francis LeBrasseur. The following March the remainder of Gadsden's tract, known as the Bowling Green, was acquired by Captain George Anson (CCRMCO F:89). In 1747, Lord Anson conveyed to Jermyn Wright twenty-three and five-eighths acres with marshland as far as the low water mark. He retained the land west of Anson, which became Ansonborough. George Hunter, Surveyor General, laid out the Ansonborough land (Figure 4). The names of the five streets in Hunter's Plat commemorated Anson's naval service. George and Anson streets bear his name. Centurion Street (now Society Street) was the name of the ship in which Anson circumnavigated the world; Scarborough (now part of Anson) and Squirrel (now part of Meeting) streets were the names of the ships he commanded along the East Coast (A.R and D.E. Huger Smith 1917). Thomas Shubrick also acquired a portion of the land in 1759. Subdivision and construction began immediately, but proceeded slowly. By 1788, only fifteen structures were located in the area.

Shubrick's land was purchased by the South Carolina Society that same year. Henry Laurens, a prominent merchant and owner of an adjacent tract, alluded to the Society's purchase:

> The South Carolina Society increases daily... I had much difficulty about eight years ago to persuade the members to purchase the old Brew House land for £500 sterling. Now that land would sell for about £4000 sterling... All this land about Ansonborough is covered with fine houses.

The "Old Brew House" land was LeBrasseur's Petit Versailles, one of the country estates occupying this portion of the peninsula in the early eighteenth century. As with the Neck nearly a century later, this area was gradually enveloped in the burgeoning city, first as sparsely occupied suburbs and finally as densely occupied urban center. Petit Versailles and several adjacent lots in Ansonborough were purchased in 1759 for £3500 (CCRMCO VV:506).

The South Carolina Society was established in 1736 by the French Protestant congregation of Charleston to provide aid to destitute Huguenots. The group began with meetings at a small tavern whose owner, "being in low circumstances," was the first to receive assistance. Each member paid 15 pence per week to form

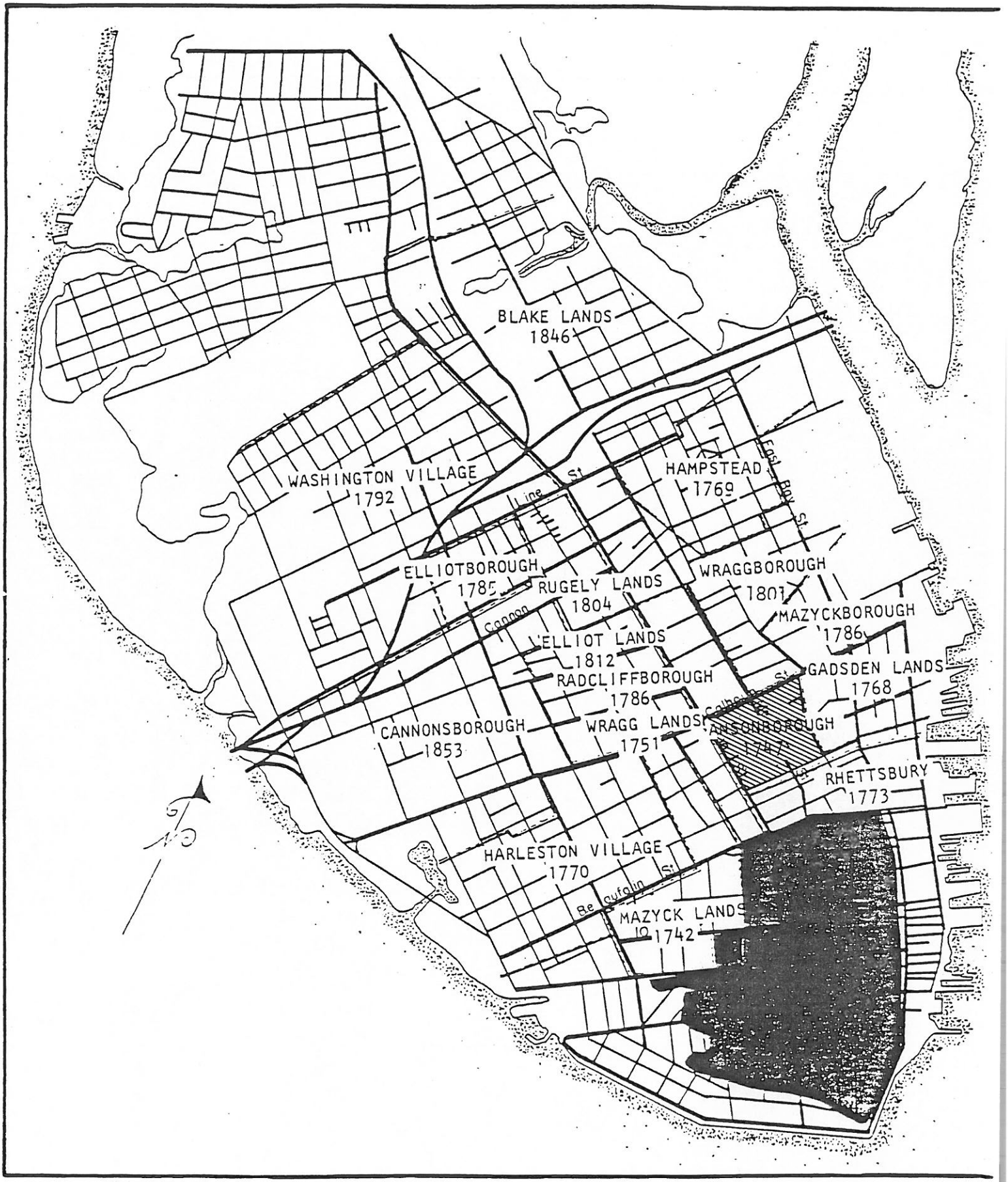
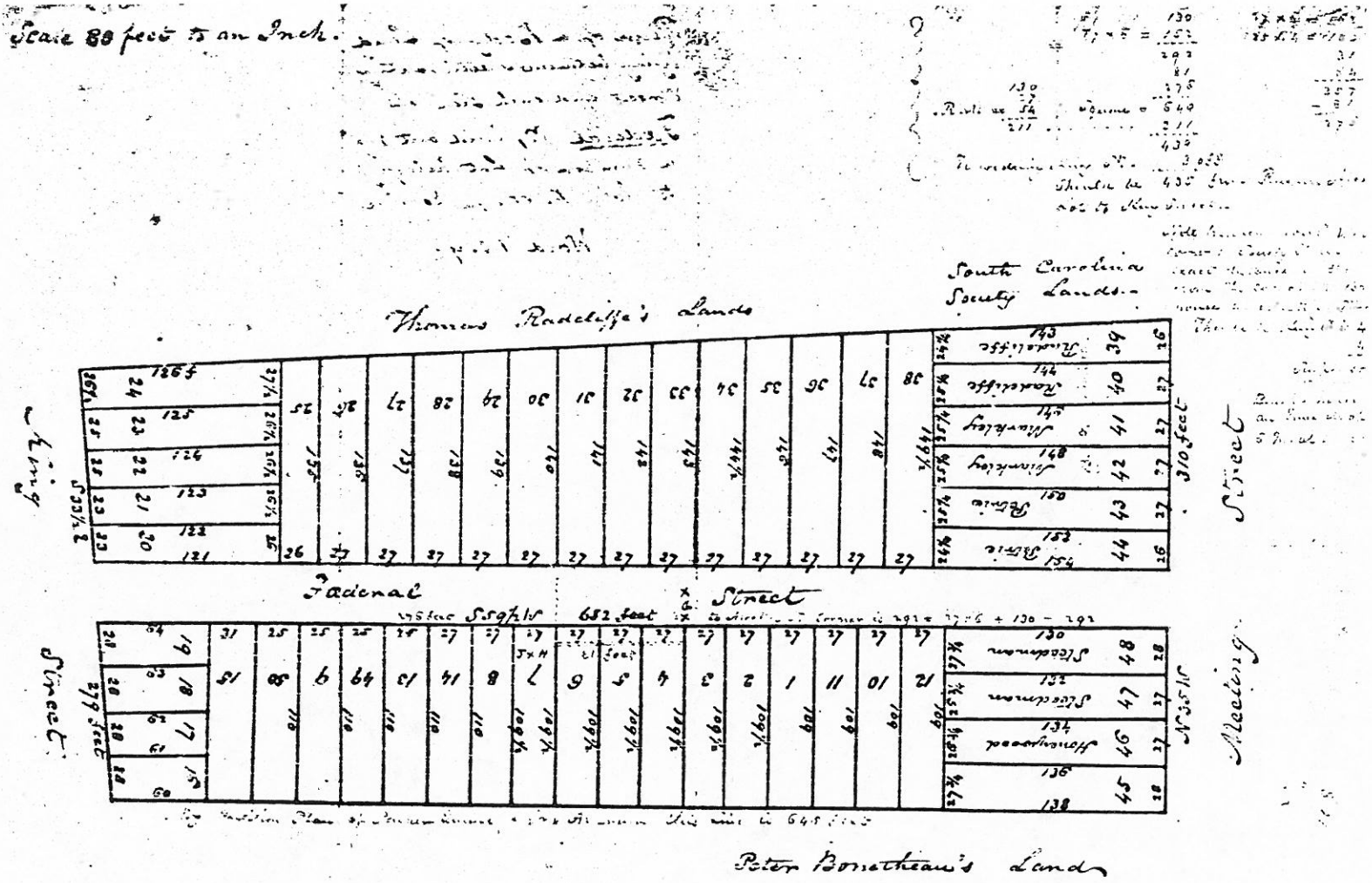


Figure 3: The Charleston peninsula, showing subdivisions above the Grand Model (shaded area).



Plan of a Body of Land lying between Meeting & King Streets, is part of Ansonborough in the City of Charleston. Laid out into Lots and belonging to John Rutledge Esquire.

Copied from a plan in Purcell's handwriting among the City papers.
Pencil Notes by Myself. Charles Parker.

486

Figure 4: Example of subdivision of Ansonborough tracts (McCrady Plat 486).

a relief fund and from that the society derived the appelation of the "Two-Bitt Club." It was also known as the French Club since the original members still spoke the French langugage and used these meetings to converse with their countrymen in their native tongue. In 1737 other non-Frenchmen became members and after much debate, the Society adopted the name Carolina Club and "admitted the English language."

The South Carolina Society was the first of the charitable societies in Charleston to incorporate in 1751. The benevolent society expanded its goal of aid to the destitute to also "erect, endow and support proper schools, especially the maintenance and education of such poor and helpless orphans or indigent children." The Society was already active in education. A clause in the 1739 rules provided that the orphans of former Society members should be educated and kept at the expense of the Society until a certain age. For males, it was until the age of 14 at which time they were to be bound to a handicraft trade and for the females, until 12 at which time they were to be bound to a housekeeper, "that she may learn to get her bread by the use of her needle" (South Carolina Society 1937).

The 1751 charter also granted the Society the right to possess "any estate or estates, real or personal, messages, lands, tenements or hereditaments of what kind or nature soever... and to sell, alien, exchange, demise or lease the same." In 1759, the Society purchased land in Ansonborough. Buying real estate in Ansonborough proved to be a good investment. In addition to bringing in substantial rents, a portion of it that was purchased for L3500 sold for L8160 before 1770. With the remaining money, the Society acquired a site for a school building (now 55 Society) with an adjoining apartment for the Tutor's residence and over which a "spacious and elegant Hall" would be maintained for the Society. The building was constructed in the early years of the next century.

The South Carolina Society gradually sold their Ansonborough holdings (Figure 5). In 1795, lot #22 (now #66) was purchased by Antoine Francis De La Jouchere (CCRMCO R6:287). The lot measured 45 feet along Society Street and 127 feet 3 inches along the west. The deed specifically mentions a house, as well as outbuildings, passageways, entries, and improvements. De La Jouchere owned #22 Society between 1795 and 1799, and was listed in the City Directory as a bricklayer. De La Jouchere is later listed as a planter and merchant. He defaulted on his mortgage and equity on the property.

In 1799 the property at 22 Society was purchased by John Baptieste Villaneuve, a merchant who maintained his shop on Nichols' Wharf (CCRMCO Z6:37). The property was deeded to Villaneuve's wife, Susannah Peigne, in a marriage contract (CCRMCO F7:449). The property was held by James Miller, trustee for Susannah Villaneuve, in 1802. The marriage settlement of $10,000 also included the house and lot at #9 Society Street,


REFERENCES
To the Streets Alleys Lanes, Squares, Wharves
PUBLIC BUILDINGS, Cul de Sacs &c.
STREETS.
SQUARES.
CUL-DE-SACS.
BOROUGHS.
ALLEYS.
LANES.
WHARVES
PUB. BUILDINGS.
ENGRAVED
for the PATRONS of
J.J. NEGRIN'S
DIRECTORIAL
REGISTER
&
ALMANAC.
CANNONS BOROUGH
ASHLEY RIVER.
COOPER RIVER.
CHARLESTON
FEDERAL GREEN
Alexander St
PLAN OF THE CITY OF CHARLESTON SOUTH CAROLINA.

Figure 5

> two Negro men slaves named John and Jaques, together with all the furniture and plate of every description in the aforesaid house, together with his horse and chair.

Susannah Villaneuve and her trustee, James Miller, sold #22 Society in 1808 for $3876 to Mrs. Catharine Munro, a widow (CCRMCO A8:151). Mrs. Munro was a well-known midwife, and worked in the city from at least 1801 through 1826 (City Directories 1808-1826).

In 1824, Catharine Munro placed the Society Street property in trusteeship with William B. Wilkie, cashier of the Union Bank of South Carolina. The property was sold in 1826 to John C. Jones for $4125 (CCRMCO R9:186). John Jones was a grocer who operated his business on the northwest corner of Wentworth and Coming streets. The deed specifically mentions a brick house on the lot, along with other outbuildings.

John Jones' property passed to his new wife and former property owner, Catharine Munro Jones, by will in 1826 (Will Book 38:681). The property was in possession of Catharine Jones' heirs, Margaret Mackie and Robert Munro, and listed as a vacant lot, when the mortgage was foreclosed against Mrs. Jones' heirs, and the property was seized. What happened to the house is unclear. The property was listed as "all that vacant lot of land," when the Master in Equity sold the property to John C. Kerr in 1838.

Charleston was still recovering from the major fire of 1835 when the city's most disastrous fire broke out in a small fruit store at the corner of Cumberland and King streets. Driven by strong winds, the fire quickly spread east and north. City firefighters were hampered by a long spring drought, which left the water supply low and the wooden buildings dry. Despite their best effort,

> the flames...swept onward like a tempest, and the resinous vapors of the wooden buildings, converted the atmosphere into a sea of fire, which overwhelmed everything within its reach (Pease and Pease 1978:281).

By morning, nearly 200 acres of the city lay in ruins. The fire covered a large area roughly bounded by South Market, Archdale, St. Philips, East Bay, and Society streets (Figure 6). Though the city had legislated against wooden buildings for years, the area was densely occupied with them. Among the Society Street properties listed as destroyed in the April 30, 1838 newspaper account was "a new three story wooden house, owned by J.C. Kerr, not occupied"(Charleston Courier, 1838).

The city resolved to rebuild their town, and redoubled their efforts to build in brick, rather than the volatile wood. Loans available to victims of the fire stipulated that the rebuilding

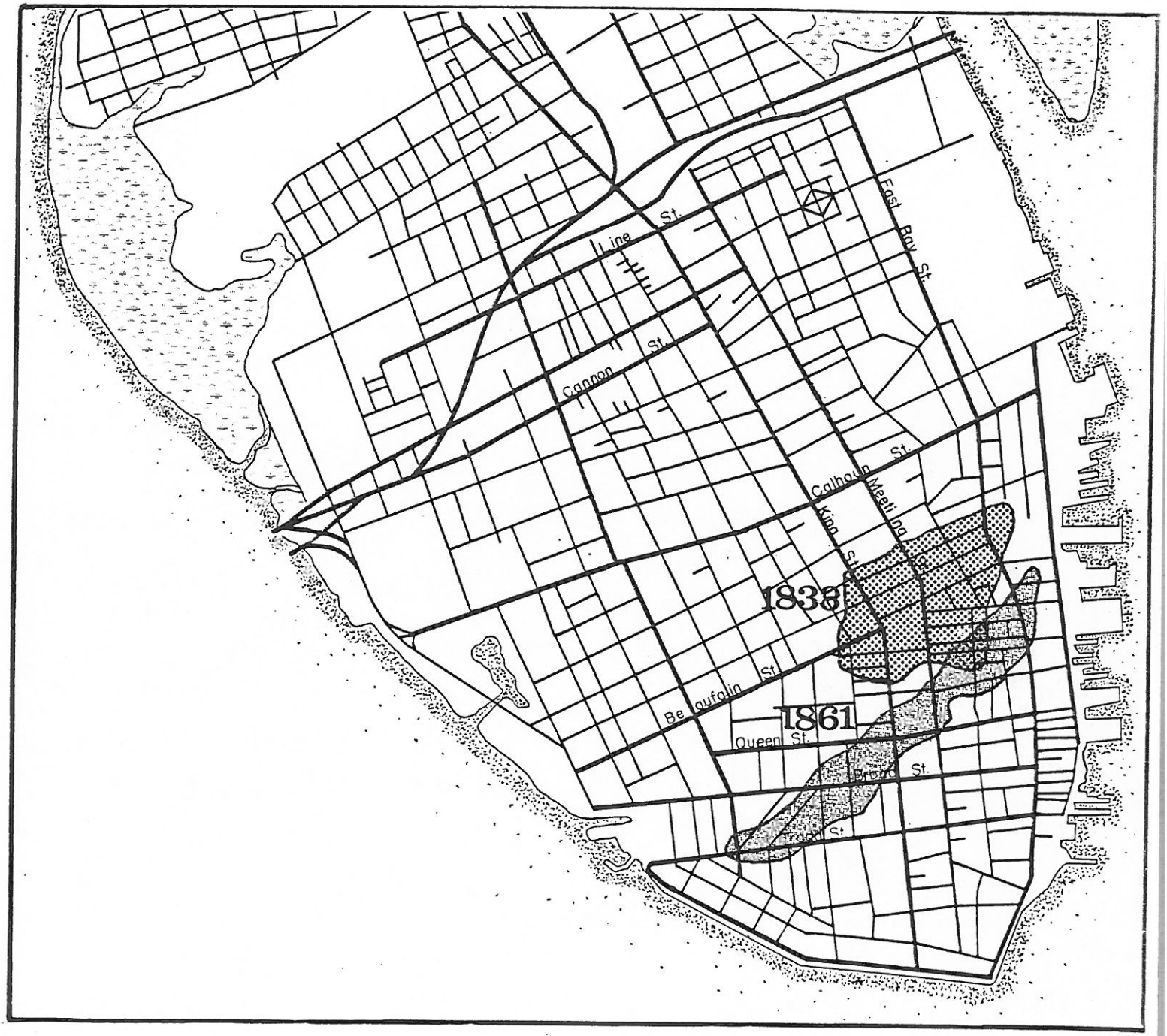


Figure 6: Location of major fires in the nineteenth century.

be done in brick which accounts for the preponderance of brick structures in the Ansonborough area.

John Kerr was a relatively prosperous merchant, variously listed as a hatter, general merchant, and even grain inspector. His businesses were listed on East Bay and King streets (CCRMCO Q10:328). A year after his purchase, Kerr sold the Society Street lot to William T. Hieronymus (CCRMCO D11:435), who obtained a fire loan and built the three story house presently standing. The house is identical to that next door at #64, built at the same time by Mrs. Elizabeth Carsten. Hieronymus specified that his house be built like Mrs. Carsten's (Historic Charleston Foundation files).

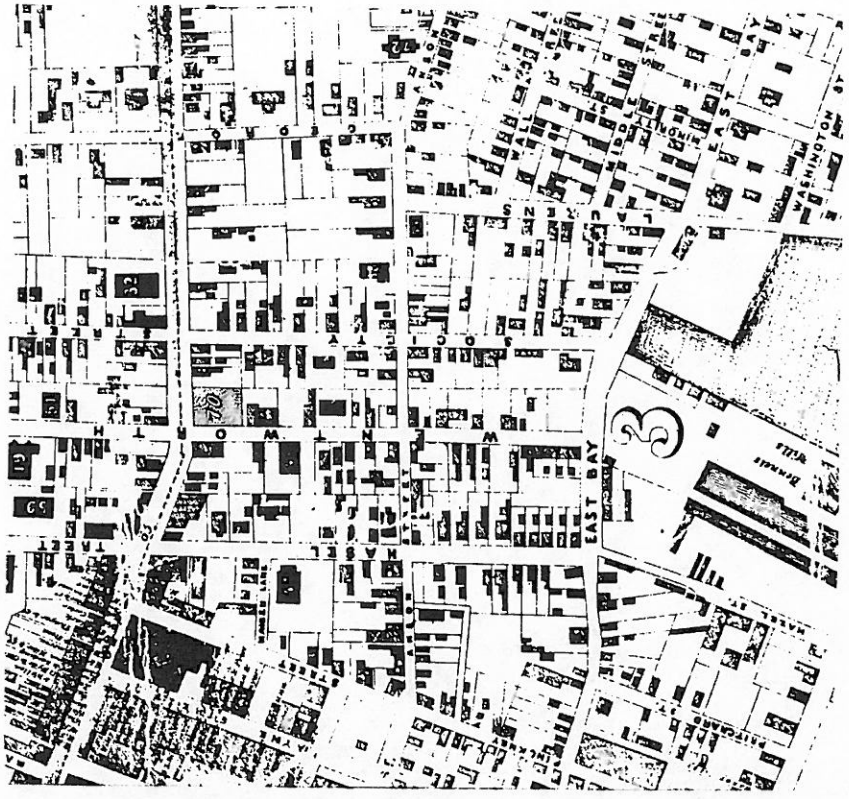
Hieronymus was an Austrian, who moved to Charleston from Kentucky. He was a keeper of horses, and maintained Hieronymus and O'Brien Livery Stables on Church Street. Like many of the previous property owners, Hieronymus had his share of financial difficulties. He defaulted on his mortgage payments, and the bank foreclosed in 1847. The property was advertised for sale:

> all that lot, piece or parcel of land, with the three story Brick Dwelling House and out-buildings thereon, situate lying and being in Society Street in the City of Charleston, formerly belonging to the South Carolina Society and known in the plans of the lands of Ansonborough, in Charleston aforesaid, by the number 22 (Charleston Courier October 17, 1849).

In 1849, the property was purchased by Martha R. Roper, widow of Robert William Roper and granddaughter of Henry Laurens. She lived at her family's home at 7 Legare Street, and obviously rented the Society Street property.

Throughout the early nineteenth century, occupation of the Ansonborough neighborhood increased. The area featured relatively small lots and modest houses, occupied by the city's small merchants and skilled craftspeople (Figure 7). A review of Ward 3 in the 1853 Ward Book suggests that the lot size (45 x 127 feet) was large and the appraised value of the house and lot ($7000) was high for the neighborhood, where appraised values ranged from $2500 to $10,000, with $3500 being the most common. Mrs. Roper is listed as the owner of this property in both 1853 and 1864. However, the dimensions listed for the property, 90 by 210 feet, suggest that Mrs. Roper also owned adjoining properties. Examination of the architectural styles in 66 Society Street suggest that Mrs. Roper made many improvements to the Hieronymus house, including the ironwork along the piazza and facade.

During the mid-nineteenth century, Ward 3 (bounded by Queen, Meeting, Calhoun, and Washington streets) was home to a disproportionate number of Charleston's poor Irish workers, who crowded into the slum areas just north of Market Street and along



1852

1872

Figure 7: Ansonborough in 1852 and 1872 (from Bridgens and Allen 1852; Drie 1872).

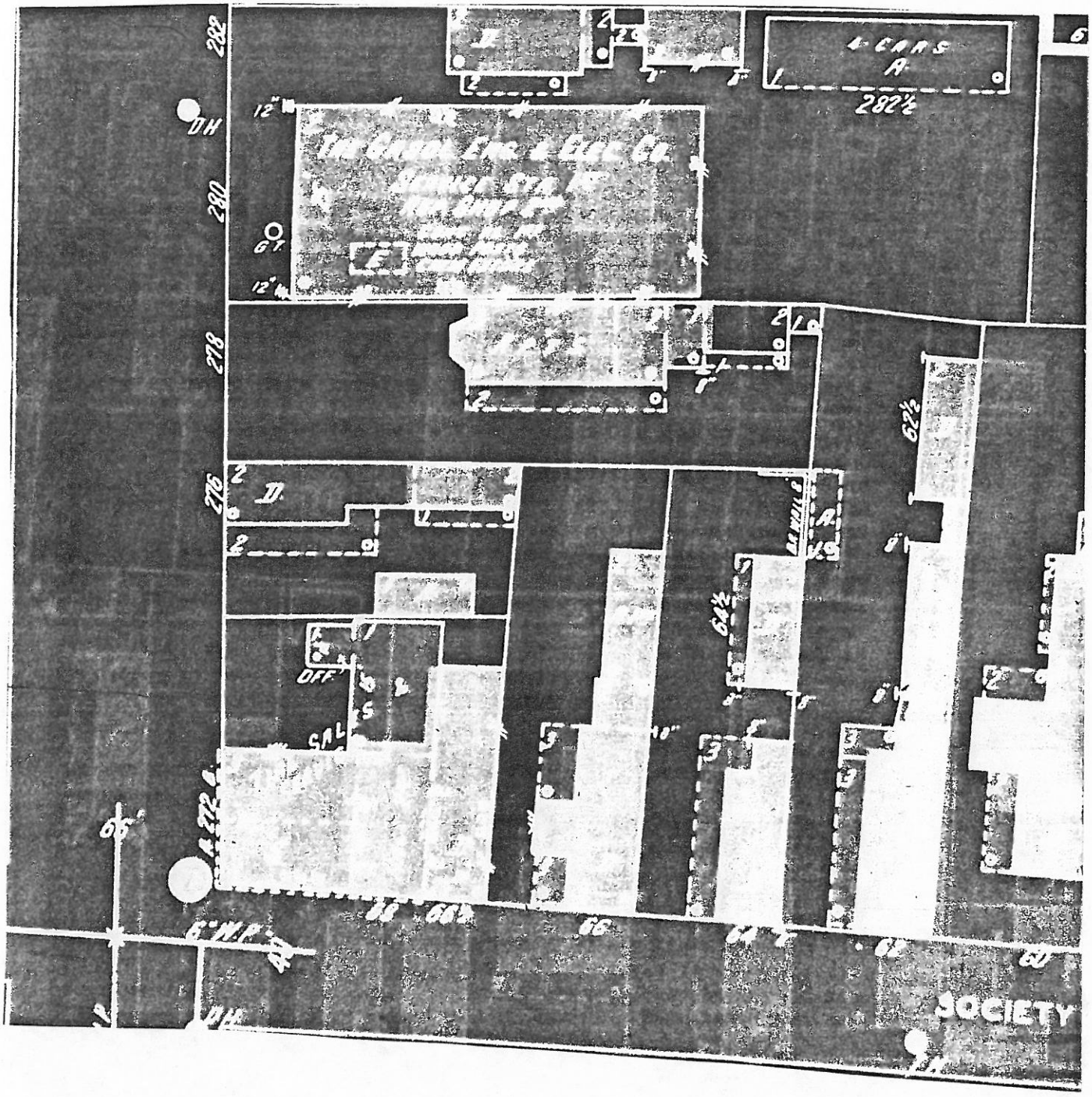
the waterfront. Nor were all of the Ansonborough residents white. In 1861 free and enslaved blacks accounted for 5.2 and 31.2 percent of the Ward 3 population, respectively (Rosengarten et al. 1987:73).

When Mrs. Roper died in 1870, the property was sold to Morris Israel, a broker, who leased it as a boarding house in the late nineteenth century. In 1906, the property was sold to Mary F. O'Rourk; the house stayed in the O'Rourk family until 1960. During the early twentieth century, the status of the Ansonborough neighborhood declined dramatically (Figure 8). By 1940, 86 percent of the dwelling units were tenant occupied, 10 percent needed major repairs, and over 40 percent had no private bath (16th Federal Census 1940). The neighborhood remainded mixed; 28 percent of the units were occupied by non-whites.

By the time Historic Charleston Foundation tackled Ansonborough as its first restoration project, the area was predominantly tenements (Historic Charleston Foundation files 1967). Ansonborough, as defined by the Foundation project, applies to a 6 block area in the mid-city plus a portion of East Bay Street, comprising parts of four historic suburbs; Ansonborough, Rhettsbury, Laurens' Lands, and Gadsden's Lands. The oldest dwelling in the city, the 1712 William Rhett House, is located in Ansonborough, along with 125 pre-Civil War houses, four churches, and the first public high school.

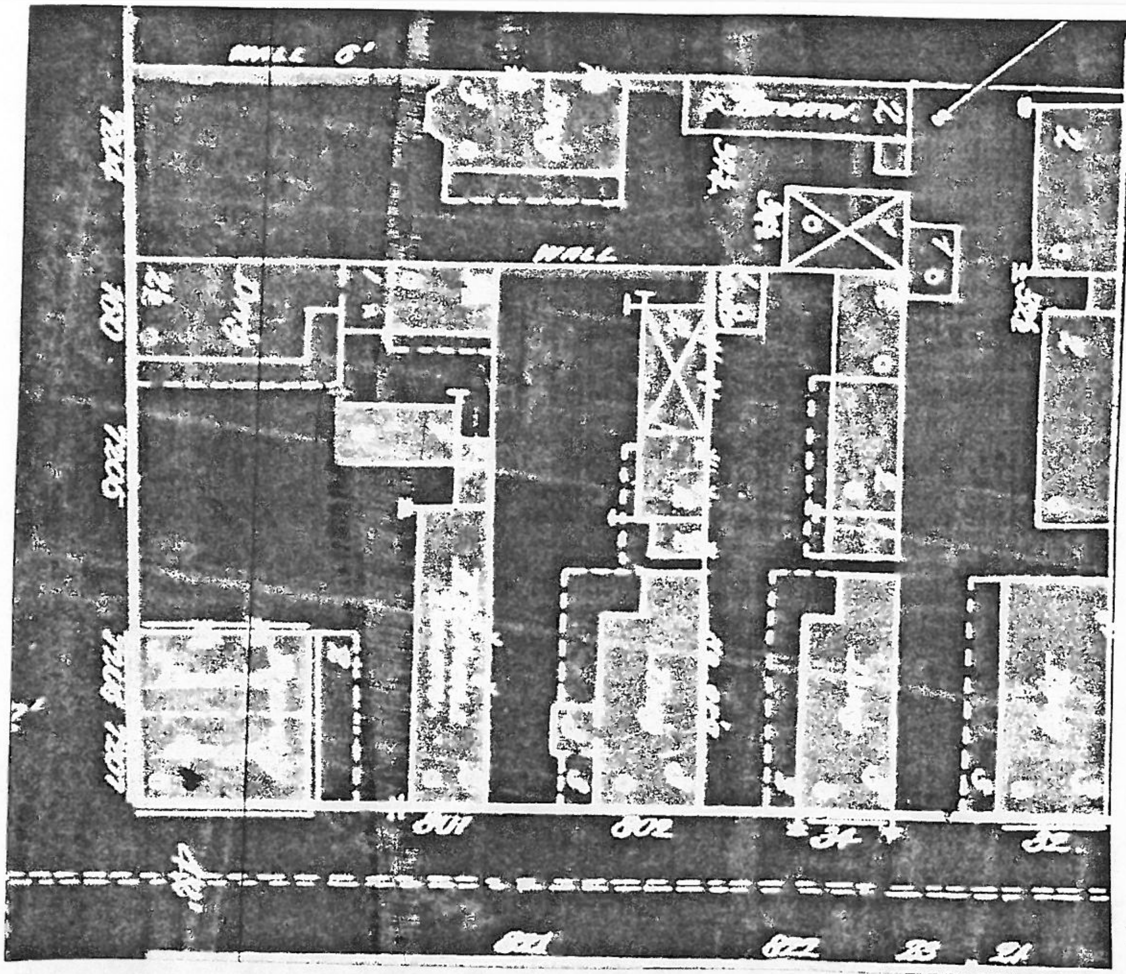
In 1960, Nan Buck and John Buck Auletto purchased 66 Society Street and planned to raze it. The Foundation instead managed to purchase the property to preserve and resell. The property changed hands several times before the Werrells bought and restored the house. At the present time, Ansonborough reflects the efforts of Historic Charleston Foundation, with most of the homes restored to their antebellum appearance.

The 66 Society site represents a poorly-known aspect of Charleston's history; the evolution of a middle class property. Purchased as part of a large investment tract, the house and lot was owned by a number of small entrepreneurs. When the first and second houses were destroyed by fire, a more substantial brick house was constructed. This was also owned and occupied by a middle-class businessman. Later, the property was rented. As Charleston's postbellum economic slump continued into the early twentieth century, the economic status of the tenants, as well as the condition of the house, declined. The house today, fully restored, reflects current concern with historic preservation and city appearance.

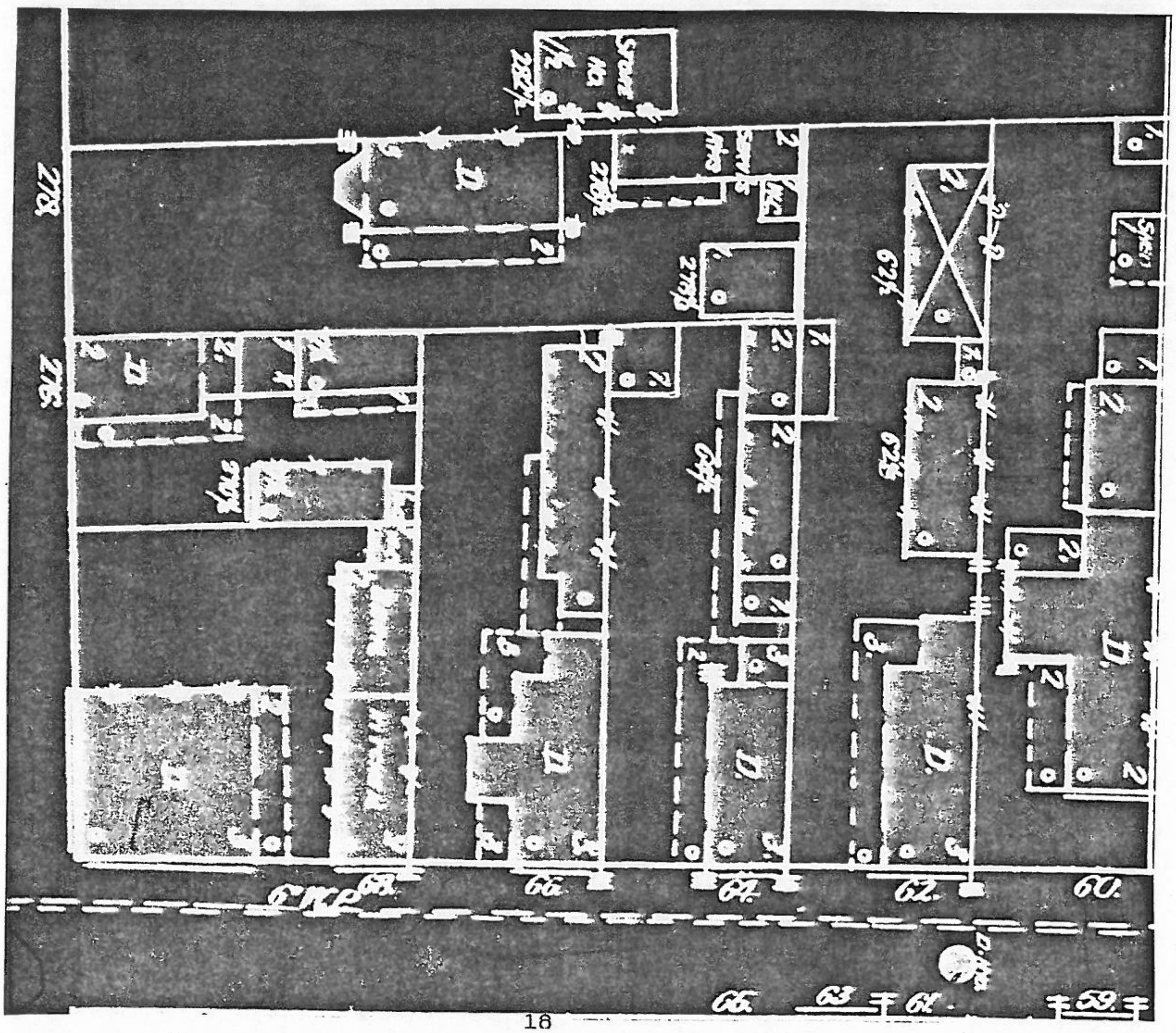


1942

Figure 8: Sanborn Fire Insurance Maps for 1942, 1884, and 1902.



1884



1902

CHAPTER III

FIELDWORK

Site Setting

Sixty-six Society is located on the north side of Society street, and is the first dwelling east of Meeting Street. The relatively modest lot retains its original dimensions of 45 by 127 feet, and contains a three story brick single house. The house fronts directly on the street, along the east side of the property. A short driveway adjacent to the main house occupies the remainder of the lot width. A large outbuilding, which functioned as stables, carriage house, and possibly slave quarters, is connected to the main house by a small kitchen. These buildings have been altered several times in the last hundred years (Sanborn 1884, 1902, 1942), and the stable was undergoing extensive renovation at the time of the archaeological investigations. The small rear yard contained a few trees and a variety of ornamental plantings along the edges of the house and property. The yard was enclosed on all sides by a six foot high brick wall. There is a perceptible rise in elevation from front to back (Figure 9).

When archaeological excavations commenced, the site had already been cleared for pool construction and the limits of the pool had been staked. Heavy equipment was on site for pool excavation, and the contractor reported that the ground had been scraped for site preparation.

Excavation Methodology

Investigation of the site began when Museum personnel visited the site at the request of Historic Charleston Foundation. The exposed ground surface was examined and surface materials were collected. The stratigraphy of the postholes excavated to place the stakes were also examined. These observations indicated that artifacts were indeed present on the site, but additional information was required to quickly assess the need for archaeological investigation. To accomplish this, the heavy equipment already on site was used to excavate a sample trench. This trench was located in the northern limits of the pool area, and measured approximately 2.5 by 7.0 feet. The trench was excavated in arbitrary .5 feet levels to a depth of 2.4 feet below surface. At this point a concentration of artifacts, including several large sherds, was encountered. Based on these data, and the stratigraphy of the trench, it was determined that the site contained intact archaeological resources.

a

Figure 9a: Front of Main House, 66 Society Street.

Figure 9b: View of back yard from the street.

b

Controlled excavations were limited to the footprint of the planned swimming pool, a kidney-shaped area that measured roughly 35 feet north/south and 17 feet east/west (Figure 10). Horizontal control was maintained with a transit and steel tape, and excavations were tied into the true northeast corner of Meeting and Society streets. A point was established on the curb edge 101.64 feet east of the true corner. From this point on the outside of the street curb, the transit was turned 90 degrees, and points were placed within the pool area at 86, 91, and 96 feet north. A 5 by 5 foot unit was laid out to the east between the 91 and 96 pins, and was designated Test Pit 1.

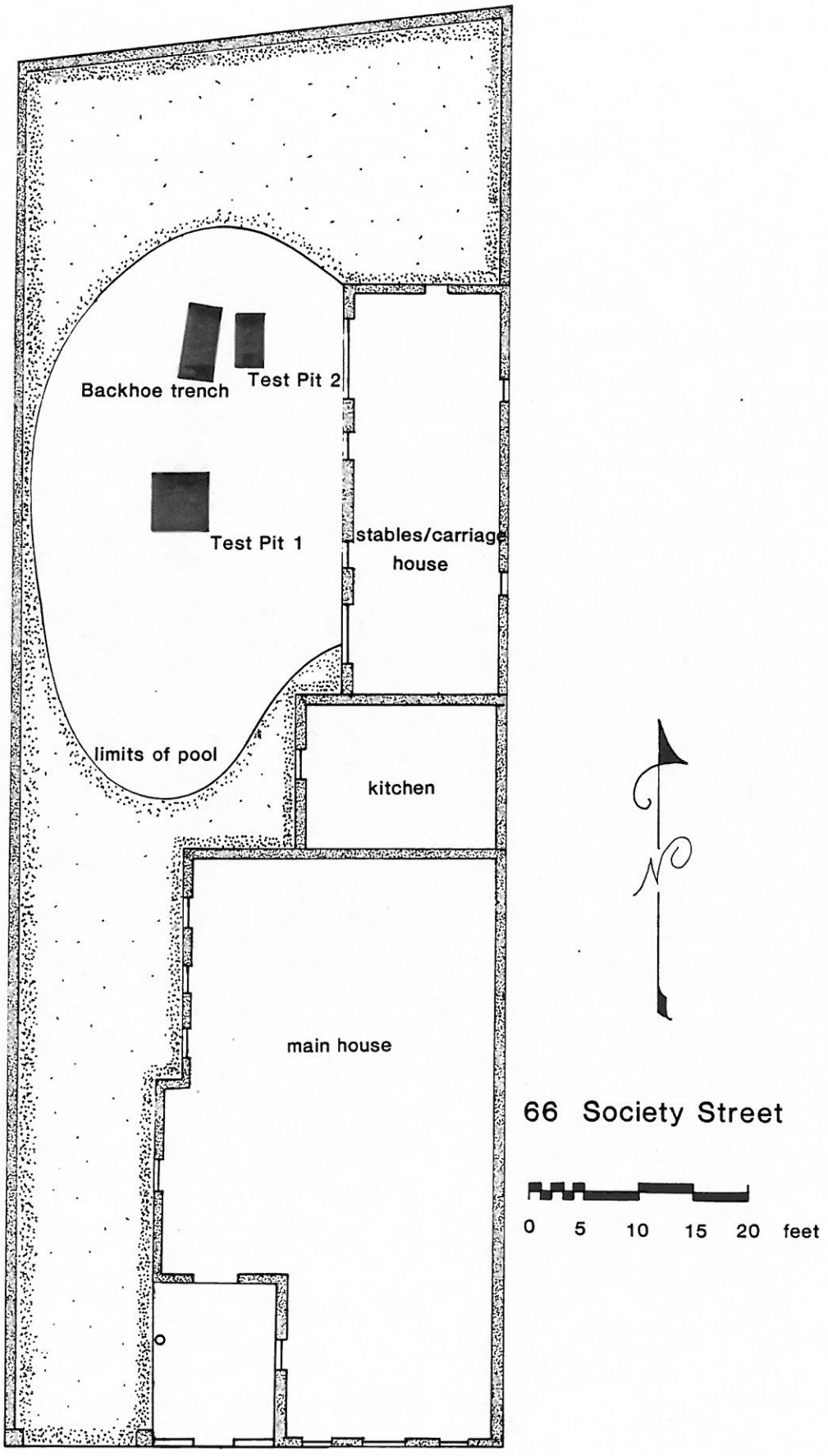
Test Pit 2 measured 5 feet north/south by 2.5 feet east/west. This unit was established by measuring from the 91 and 96 pins on the west edge of Test Pit 1; the southwest corner of Test Pit 2 is 7.5 east and 15 feet north of the southwest corner of Test Pit 1. The remaining deposits in the backhoe trench were also excavated.

Vertical control was maintained with the use of the transit. Elevations were taken relative to a datum point established on the north edge of the middle door of the restored stable building. This point was given an assumed elevation of 10.0 feet, and all elevations are expressed as feet above sea level, relative to this elevation. Excavations were conducted by hand using shovels and trowels. Excavations followed natural zones; when deep proveniences were encountered, they were subdivided into arbitrary levels. All materials were screened through 1/4 inch mesh, and materials from each provenience were bagged and tagged separately (Figure 11).

In addition to artifactual material, faunal and soil samples were retained. Due to the limited nature of the excavation and the lack of organically rich proveniences, only one flotation sample was retained. Color photographs were taken at the base of each excavation, and when notable proveniences were encountered. Artifacts were bagged and tagged, and a Field Specimen (FS#) log was maintained. Complete field notes were kept, including narrative notes, feature forms, and excavation unit forms. Planview and profile drawings were made for each unit.

Description of Excavated Proveniences

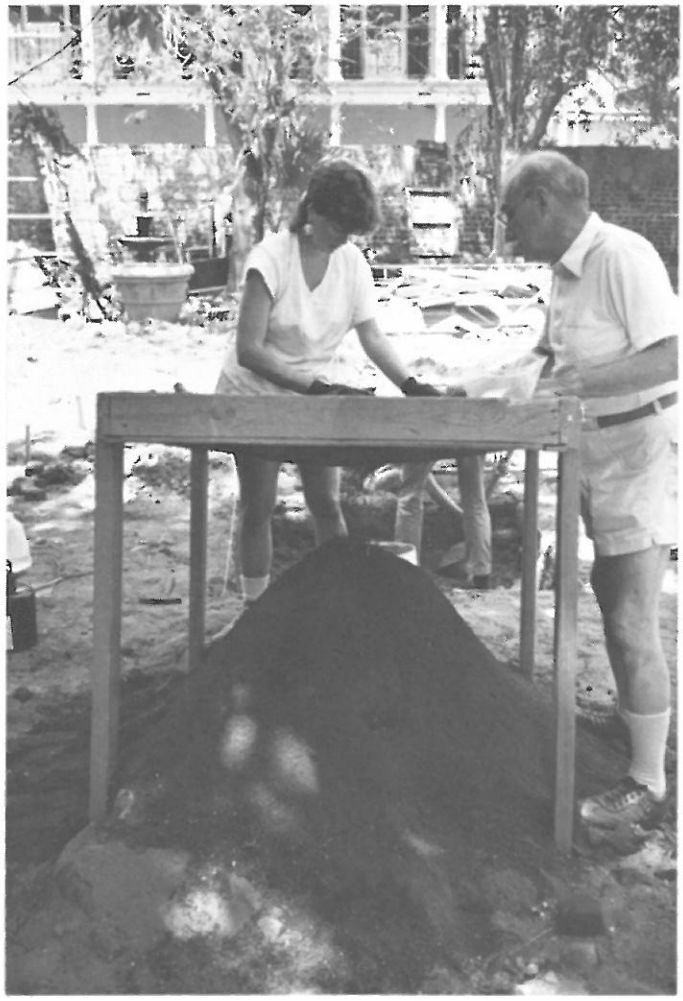
Test Pit 1 contained three zones and numerous features. Excavation began with Zone 1, a deposit of highly mottled clay, tan sand, and brown soil, with modern artifacts. This configuration suggests recent soil disturbance by heavy equipment. Zone 2 was defined as a thin lense of coarse building sand, containing no materials, followed by a thin layer of black soil with coal, brick, and mortar. Zone 1 initiated at 9.44 ft., and the base of Zone 2 was encountered at 8.92 ft. Directly beneath this was brick laid in sand in a running bond pattern, reflecting a driveway or paved courtyard area. This feature,



Society Street

Figure 10

a



b

Figure 11a: Excavating Feature 4
Figure 11b: Screening Material from Test Pit 1.

which covered the entire unit, was designated Feature 1. Directly beneath this paved area was a soil matrix designated as Zone 3. This consisted of medium grey-brown soil containing mortar, coal, and brick, with a heavier concentration of mortar along the western side of the unit. This zone was excavated in three arbitrary levels. Although portions of the zone appeared to be lighter in color, there were no definable divisions in this soil deposit. Sterile soil was encountered at the base of Zone 3 level 3, and was significantly higher in the northern portion of the square, reflecting the above-ground topography of the site.

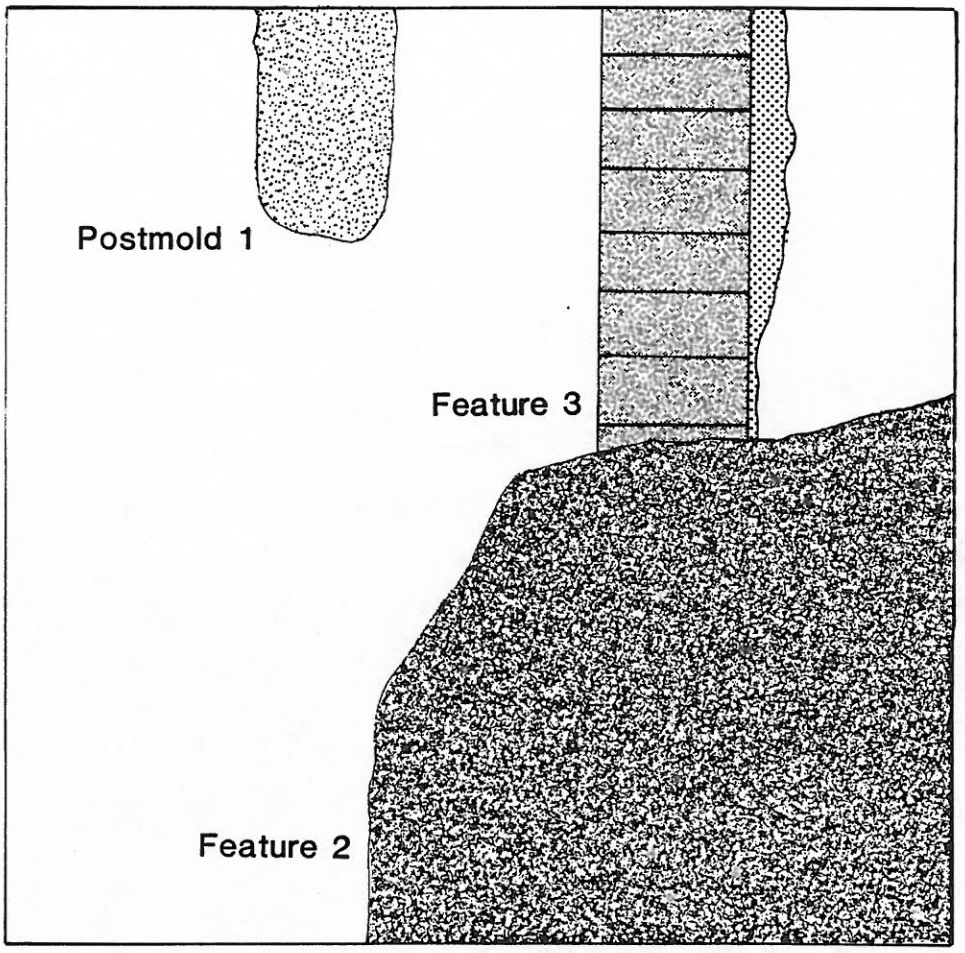
Several features were encountered intruding into sterile soil (Figure 12). Feature 2 was located in the southeast corner of the unit. The circular pit contained medium tan-grey sand with broken bricks and quantities of iron. Upon excavation it proved to be a large pit filled with domestic refuse, bricks, tin cans, and faunal material, including an articulated dog. Feature 2 initiated at 7.74 ft. and continued to a depth of 5.23 ft.

Feature 3 was a brick foundation, a single brick wide, laid sideways. Feature 3 ran north/south, probably across the entire length of the unit, but Feature 2 intruded into it. A slight builders trench was visible along the eastern side of the feature; it contained no materials. Postmold 1 intruded into the northern wall of the unit. It was rectangular and was filled with medium tan sand with quantities of coal and mortar. It also contained large brick fragments, and a cluster of bricks at the base (Figure 13a).

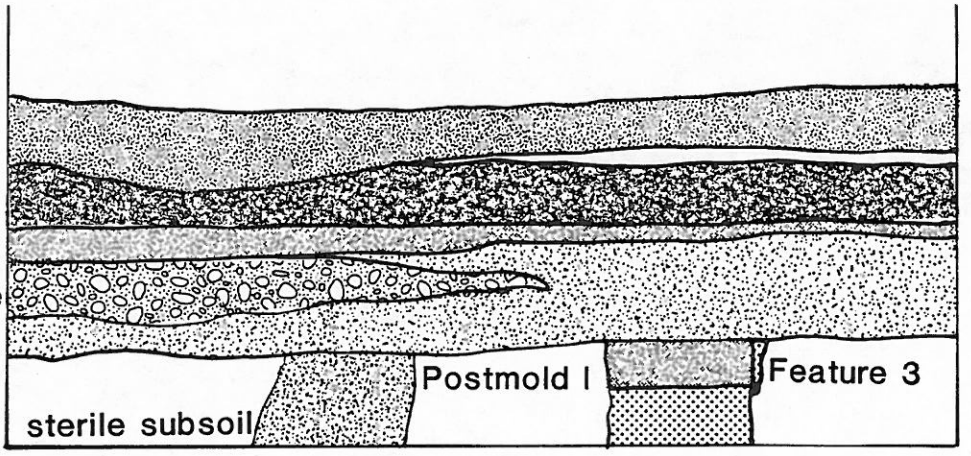
Excavation of Test Pit 2 began with Zone 1. This hard-packed, disturbed zone was sampled and discarded. Zone 2 consisted of the same black dirt as in Test Pit 1, and contained metal, brick, and coal. This layer was also compacted. Beneath this was a slightly lighter, slightly coarser zone. This deposit contained small sherds, quantities of coal and mortar, and pockets of mottled soil. This was originally designated Zone 2 level 2, but is actually a separate deposit, not encountered in the previous unit.

At this point, excavation of the unit was abandoned due to time limitations. Efforts were instead concentrated on the backhoe trench, located .7 feet to the west. This trench was known to contain significant deposits, and the proximity to Test Pit 2 would make the data repetitious.

Controlled excavation of the backhoe trench began by cleaning the profiles. The tan sand layer 2.4 feet below surface was then excavated. This deposit contained quantities of artifacts, and continued for 1.5 feet, where two overlapping features were observed intruding into sterile soil (Figure 13b). These were designated Features 4 and 5, while the soil above was designated Features 4/5 combined. Feature 4 occupied the southwest half of the unit and was dark tan-grey sand with sparse material, charcoal, and mortar. Feature 5 was a large pit of coarse tan sand full of mortar and brick. It continued into the



Test Pit 1, base Zone 3



Test Pit I, North Profile

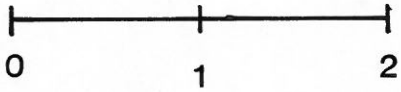


Figure 12

a

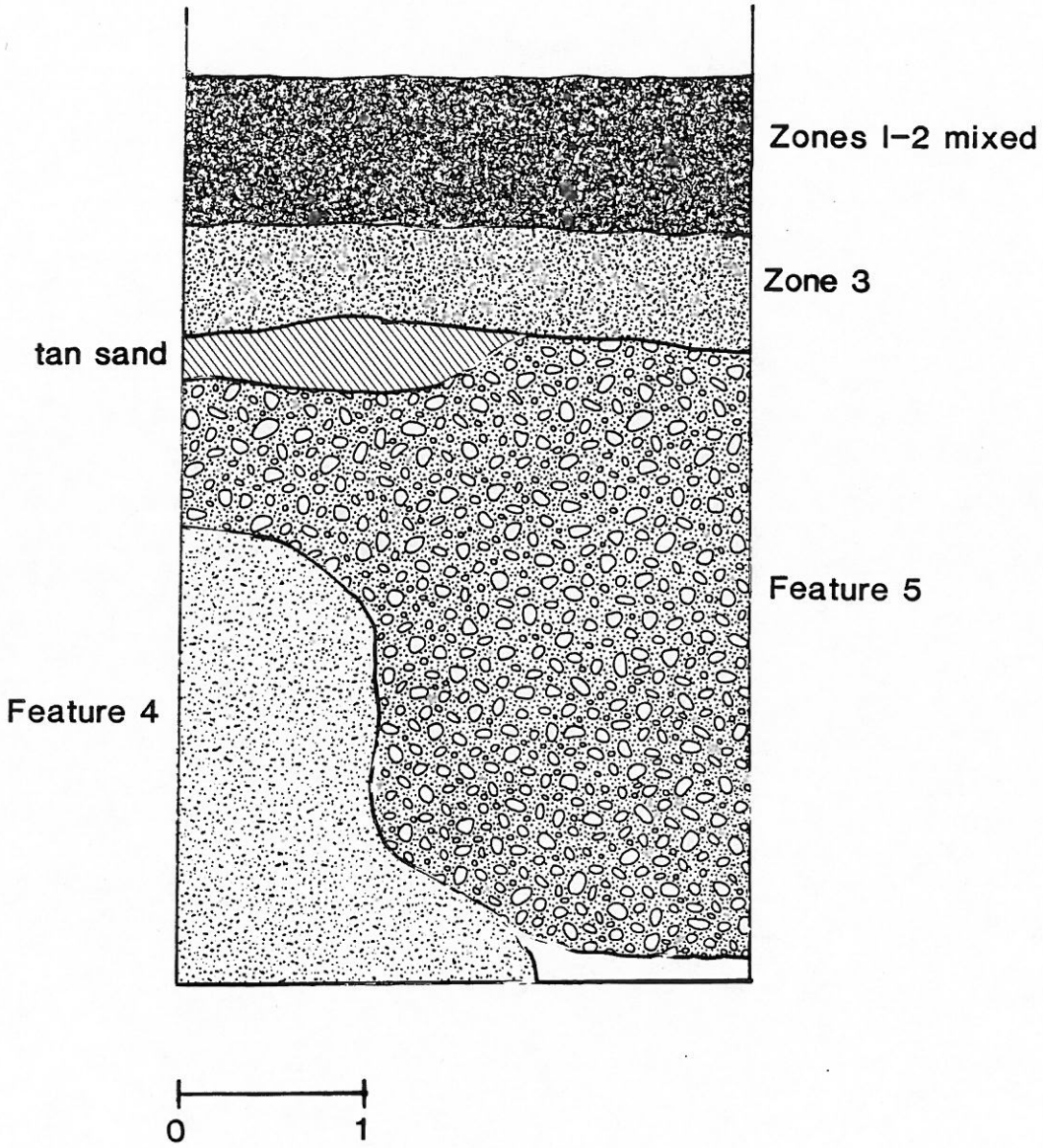
b

Figure 13a: Test Pit 1, North Profile.
Figure 13b: Backhoe Trench, top of Features 4 and 4, facing East.

east wall of the unit. At the base of the feature, which continued to a depth of 4.82 ft., was a deposit of builders sand and a large lump of mortar. After some examination, it was determined that Feature 5 intruded into Feature 4, and thus predated it (Figure 14).

Summary

Three days of fieldwork at 66 Society resulted in the excavation of 55 square feet and the recovery of 18 separate proveniences (Table 1). Stratigraphy at the site averaged two feet in depth with at least three distinct zones. Large features intruded into sterile soil to a depth of over five feet below surface. The excavated proveniences span the nineteenth century.



Backhoe Trench, North Profile

Figure 14

Table 1
Provenience Guide

FS#	Provenience	function	TPQ item	Date of Deposition
3	TP1, zone 1	zone	whiteware	20th cent
4	TP1, zone 2	zone	comb tooth	1870s
5	TP1, zone 3 lev 1	zone	tr.pr. ww	1840s
6	TP1, zone 3 lev 2	zone	glass	1830s
7	TP1, zone 3 lev 3	zone	milk glass	1820s
8	TP1, Feature 2	trash pit	tin can	1850s
9	TP1, postmold 1	postmold	white porc	1850s
10	backhoe cut	collected	--	
11	TP2, zone 2 lev 1	zone	rubber comb	1860s
12	TP2, zone 2 lev 2	zone	tin can	1850s
13	backhoe tr, fea4/5	feas combined	tr.pr. ww	1840s
14	backhoe tr, fea 4	trash pit	whiteware	1830s
15	backhoe tr, fea 5	trash pit	tr.pr. ww	1840s
16	TP1, zone 3 trowel	zone	creamware	1820s

CHAPTER IV

ANALYSIS OF THE MATERIALS

Laboratory Methods

Following excavation, all materials were removed to The Charleston Museum, where they were washed, sorted, and analyzed. Conservation procedures included reconstruction of ceramic and glass vessels, and stabilization of metal artifacts. Ceramic and glass vessels were restored with DAP china and glass mender, a non-yellowing glue soluble in acetone. Ferrous materials were separated in the field and stabilized by placing them in successive baths of distilled water to remove chlorides, then were oven-dried and bagged. Several ferrous and all non-ferrous metal items were selected for further treatment through electrolytic reduction. The ferrous items were placed in electrolysis in a weak sodium carbonate solution with a current of six ampheres. Upon completion of electrolysis, they were placed in successive baths of distilled water to remove chlorides and dried in ethanol. Finally, the materials were coated with a solution of tannic acid and phosphoric acid, and dipped in microcrystalline wax to protect the surfaces.

Non-ferrous artifacts were also placed in electrolytic reduction, in a more concentrated solution with a current of 12 ampheres. They were placed in the distilled water baths to remove surface chlorides and dried in ethanol before being coated with Incralac to protect the surfaces.

All excavated materials are curated in The Charleston Museum storage facility according to standard museum policy. Artifacts were packed by provenience in standard-sized low acid boxes, labelled, and stored in a climate controlled environment. Field records and photographs are curated in The Charleston Museum library in the high security section. Copies on 100% rag paper are available in the general research section of the library.

The first step in the analysis of the materials was the identification of the artifacts. The Museum's type collection, Noel Hume (1969), Stone (1974), and Deagan (1987) were the primary sources used, although other references were consulted for specific artifacts. Lorraine (1968), Huggins (1971), Kechum (1975), and Switzer (1974) were used to identify bottle glass. Epstein (1968) and Luscomb (1967) were used in button

identification, and Fontana and Greenleaf (1962) was consulted concerning tin cans.

Following identification, the materials were grouped by functional categories, based on South's (1977) and Garrow's (1982) models for the Carolina Artifact Pattern. South's methodology has been widely adopted by historical archaeologists, allowing for direct intersite comparison; all of the data from Charleston have been organized in this manner.

The proveniences in the present analysis are divided into three assemblages: pre-1830, post-1830, and collected units (Table 2). The pre-1830 assemblage relates to the occupants of the house (and/or houses) built before the one standing today and include proveniences of Test Pit 1, Zone 3 levels 2 & 3, and Features 4/5, 4 and 5 in the backhoe hole. The post-1830 assemblage are from deposits made in and around the extant house: Test Pit 1, Zone 2, Zone 3/level 1, Feature 2 and Postmold 1, and Test Pit 2, Zone 2. The collected units are samples collected by hand from the Test Pit 1, Zone 1, the general surface, and the backdirt pile from the backhoe hole made by the pool construction workers.

Pre-1830 Assemblage

Kitchen

Four hundred thirty-two kitchen artifacts recovered comprised 29.65% of the assemblage. Of the group, ceramics were the most numerous at 67.6%, with glass second at 25.2%, and tin can fragments third at 7.2%. Late eighteenth to early nineteenth century ceramic types dominated the ceramic assemblage. Several seventeenth to mid-eighteenth century ceramic types were also present, including combed yellow slip ware and delft. Nearly all wares were of English, German and Chinese origin; the assemblage contained only a few locally manufactured wares.

Ceramics were further divided into table and utilitarian wares. With the majority of the ceramics fragmentary, ceramic type rather than vessel form determined a sherd's placement. Tablewares comprised 91% of the ceramics, and included delft, white salt-glazed stoneware, creamware, pearlware, porcelain, whiteware, Nottingham stoneware, portobello-like ware, lusterware, whieldon ware and canary ware. The earliest tableware was delft, manufactured from the 1500s to the 1800s, available in a variety of table and chamber ware forms. Unfortunately, delft paste was soft and easily damaged. White salt-glazed stoneware, a more durable ceramic, replaced delft in the 1740s. One white salt-glazed stoneware rim sherd, the barley pattern, was recovered in the pre-1830 assemblage along with 11 delft sherds.

A revolution occurred in ceramic manufacture in the 1750s, when Josiah Wedgewood developed his cream colored earthenware, a refined earthenware, durable and inexpensive. Readily available in a wide variety of vessel forms and in matched sets, creamware

became very popular and is a common component in historic sites after 1750 (Deagan 1975). In the eighteenth century, the upper class chose creamware for their everyday ware, but after 1820, it was relegated to large, utilitarian forms such as bowls and chamber pots and was considered an inexpensive ceramic (Miller 1980).

Creamware comprised the second largest group of ceramics in the pre-1830 group at 32.53%. Most of the sherds were undecorated, although several feather-edged, shell-edged and royal pattern rim fragments were recovered along with two black transfer printed sherds, four polychrome hand painted sherds and one deep yellow sherd.

The next step in the evolution towards a white tableware was pearlware, developed in 1780 (Noel Hume 1973). By adding colbalt to the lead glaze, the vessel took on a bluish-white caste. Available in a variety of decorative motifs by 1795, some pearlware motifs (shell-edging, transfer printing, hand painting, banding, and no decoration) can be associated with specific vessel forms and price scales (Miller 1980; Otto 1977). Annular or banded ware, with its stripes of many colors and bowl or mug forms, has been associated with low status; transfer printed styles, available in matched sets with a variety of flatware and service styles, with high status (Otto 1977). Pearlware sherds comprised 35.62% of the pre-1830 assemblage, making it the most numerous type of ceramic recovered, surpassing creamware by nine sherds. The majority were hand painted, 26%, with blue transfer printed sherds second, 21%, and undecorated, 20%. Other decorations included blue shell-edged (6%), polychrome (4%), scratch blue (4%), black transfer printed (1%), and wormy finger painted (7%), mocha (1%), and other annular (10%).

During the 1820s to 1830s, the manufacturing process was refined to achieve an even "whiter" ware, named whiteware, which replaced pearlware as the preferred tableware. The same decorative motifs continued on whiteware vessels. Prior to 1830, transfer printed designs were available only in blue; afterwards, they were available in a variety of colors. The pre-1830 assemblage contained a few whiteware sherds (5%), plain, transfer printed, and hand painted. Of the seven plain sherds recovered, two were burned.

Porcelain is a component of historic assemblages from the sixteenth through the nineteenth centuries. Up until the nineteenth century, Chinese porcelain was an expensive, fine, thin ware, often in tea forms. Its presence is considered an indicator of high status (Lewis 1985; Stone 1970:88). During the nineteenth century when porcelain was directly imported into the United States in enormous quantities, the ware became inexpensive and its quality deteriorated sharply. Thus nineteenth-century porcelain is not a reliable indicator of high financial status (Herman et al. 1975:66; Lewis 1978:104). Of the twenty-four porcelain fragments recovered (8.22% of the ceramic assemblage), 61% were Chinese in origin: overglazed enamelled and underglazed

blue. The remaining 29% were white and made in Britian or America (Figure 15c-d).

Other tablewares represented in minor amounts include one fragment of Nottingham ware, one of portobello-like ware, one of whieldon ware, one of canary ware and two of lusterware. These wares were often in the form of bowls, tea pots, and other specialized ware. Portobello ware is a fine red-bodied earthenware with a clear lead glaze (resulting in a red-brown finish) on the exterior, and a white slip under the glaze on the interior. In addition, the exterior often had a yellow hand painted or transfer printed design over the glaze (Lindsay 1962). Charleston assemblages often contain wares with similar paste and glaze, but lacking the distinctive exterior decoration; these are labelled "portobello-like." Canary, or yellow-glazed earthenware, is found in the same vessel forms as creamware and pearlware, and is characterized by a bright yellow glaze (Miller 1978). The most common vessel form recovered in Charleston is children's cups. Lusterware is characterized by a lustery copper or platinum glaze over a red- or white-bodied earthenware. These three wares date to the early nineteenth century.

Ceramic types considered to be utilitarian in nature (used in food preparation and storage) included stonewares and coarse earthenwares. Manufactured in the eighteenth and nineteenth centuries, the brown and grey salt-glazed stonewares comprised 2% of the assemblage and the brown lead-glazed, black lead-glazed and unglazed earthenwares 6%, totalling 8% of the pre-1830 ceramic assemblage (Figure 15a).

Only five locally manufactured Colono wares were recovered. Colono wares are a low-fired, unglazed earthenware, produced by black slaves, historic Indians and/or both (Anthony 1986; Ferguson 1985; Wheaton et al. 1983). While Colono wares form a major component of eighteenth century Lowcountry plantation slave sites, and to a lesser degree planter sites, they too are consistently represented on urban sites, averaging 5% of the ceramics. The wares declined rapidly in the early nineteenth century, however, which may be why they comprised only 1.7% of the pre-1830 ceramic assemblage at 66 Society Street.

Glass artifacts comprised 25.2% of the kitchen assemblage of which 43% were dark green or olive wine bottles. Sixteen fragments formed a molded clear tumbler drinking vessel with a banded top edge and a narrower ribbed band below it. Half of a clear goblet base was recovered along with other fragments of clear, aqua and blue eighteenth or early nineteenth century glass. Only three glass fragments found (two brown, one milk glass) date specifically to the nineteenth century. One piece of crown top "7up" green glass was found in the top of level 2 and must have intruded from the modern layer above it (Figure 15f-g).

The only other kitchen item found were 31 tin can fragments. Although tin cans were not patented until 1810, the manufacturing of tinware in America began in 1770 in Berlin, Connecticut. After

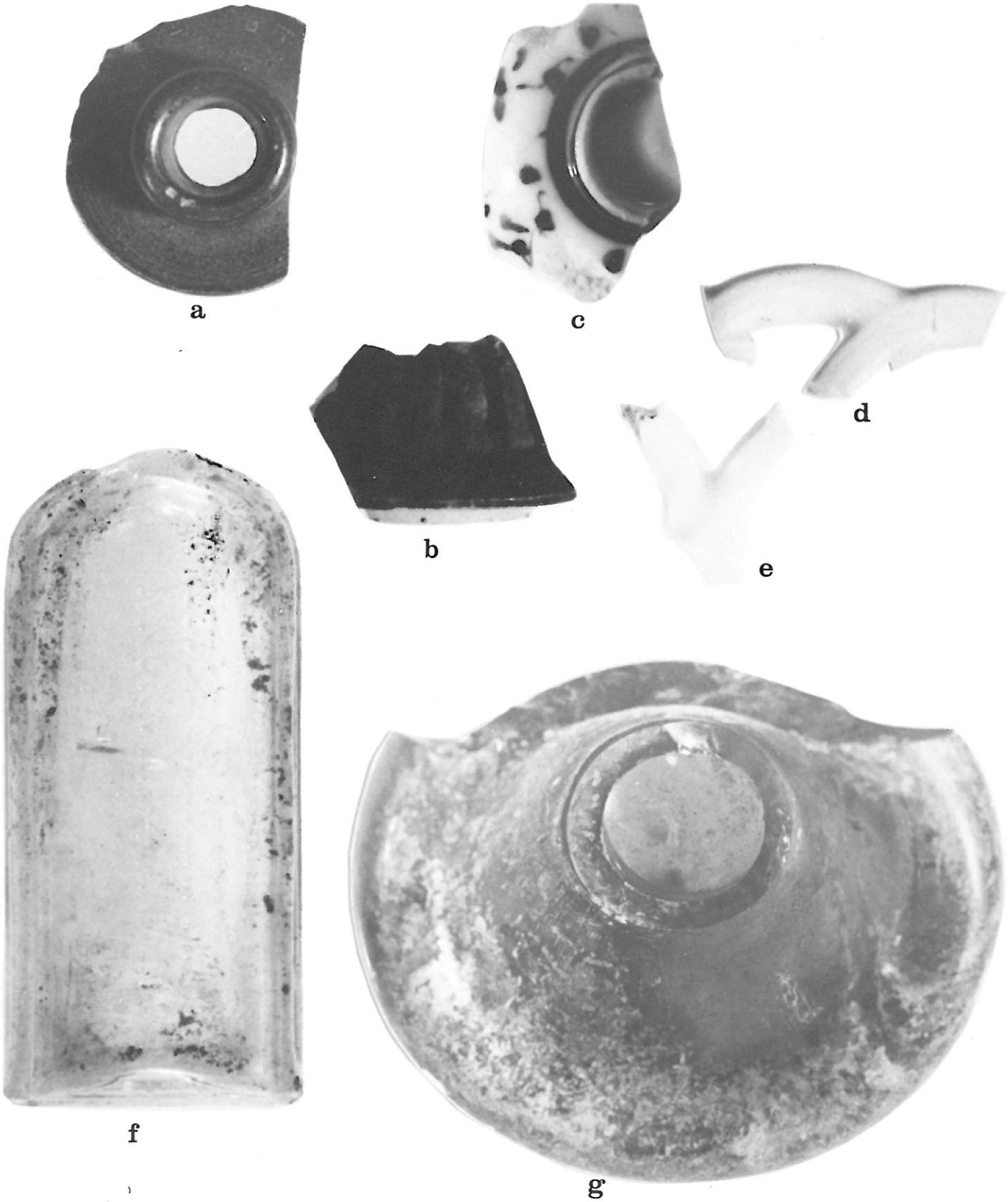


Figure 15: Ceramic and Glass Artifacts: a) Brown Saltglazed Stoneware ink bottle, b) Rockingham ware teapot lid, c) Chinese porcelain, d,e) white porcelain, f) medicine bottle, g) green hand-blown bottle base.

the Revolutionary War, American mills began mass producing it. The word "can" orginially comes from the Greek word "kanastron" meaning "basket woven from reeds;" in Latin, it changed to "canistrum" from which we derived the word "canister." The bookkeepers of William Underwood Co., of Boston shortened it to "can" and soon the name became popularized (Fontana and Greenleaf 1962). Beginning in the 1800s, tin cans were first made by cutting the can from a tin plated sheet iron by hand or foot powered scissors, then forming the body around a cylinder, and soldering the seam. Separate pieces were cut for the top and bottom, and soldered. Through a small hole left in the top of the can the food was added and then a smaller cap was soldered in place after filling. This basic method persisted until the mid-1880s, with improvements being continually invented (Fontana and Greenleaf 1962). Popular canned products included oysters, lobsters, and salmon. Most fruits, vegetables, pickles, jellies, and sauces were eventually packaged and shipped around the world from eastern seaports (Fontana and Greenleaf 1962).

Architecture

Architectural items comprised the overwhelming majority of the pre-1830 assemblage at 67.47%. Common building rubble such as brick, mortar, and slate were not retained. The architectural group consisted almost entirely of flat glass (76.9%) and nails (22.9%). One door hinge and one spike were also recovered.

Pipes

Twenty-four pipe stem and bowl fragments comprised 1.65% of the assemblage. Eighteen were stems and six, bowls, all made of white kaolin clay. Since the method of calculating dates from kaolin pipe stems is accurate only when date of deposition is prior to 1780, no bore measurements were taken (Binford 1978).

Arms

Surprisingly, no arms materials were recovered from this time period of the site. Although arms have always been a relatively small percentage of urban assemblages, they have always accounted for at least .1%.

Clothing

Clothing items accounted for .62% of the assemblage. Six buttons, the most common item found, were made variety of materials: one white porcelain, one mother-of-pearl, three brass, and one pewter (Figure 16a-e). All of these materials were used for button making in the late eighteenth/early nineteenth centuries. Craftspersons followed french styles and methods in creating metal, fine porcelain and enamel buttons in the late

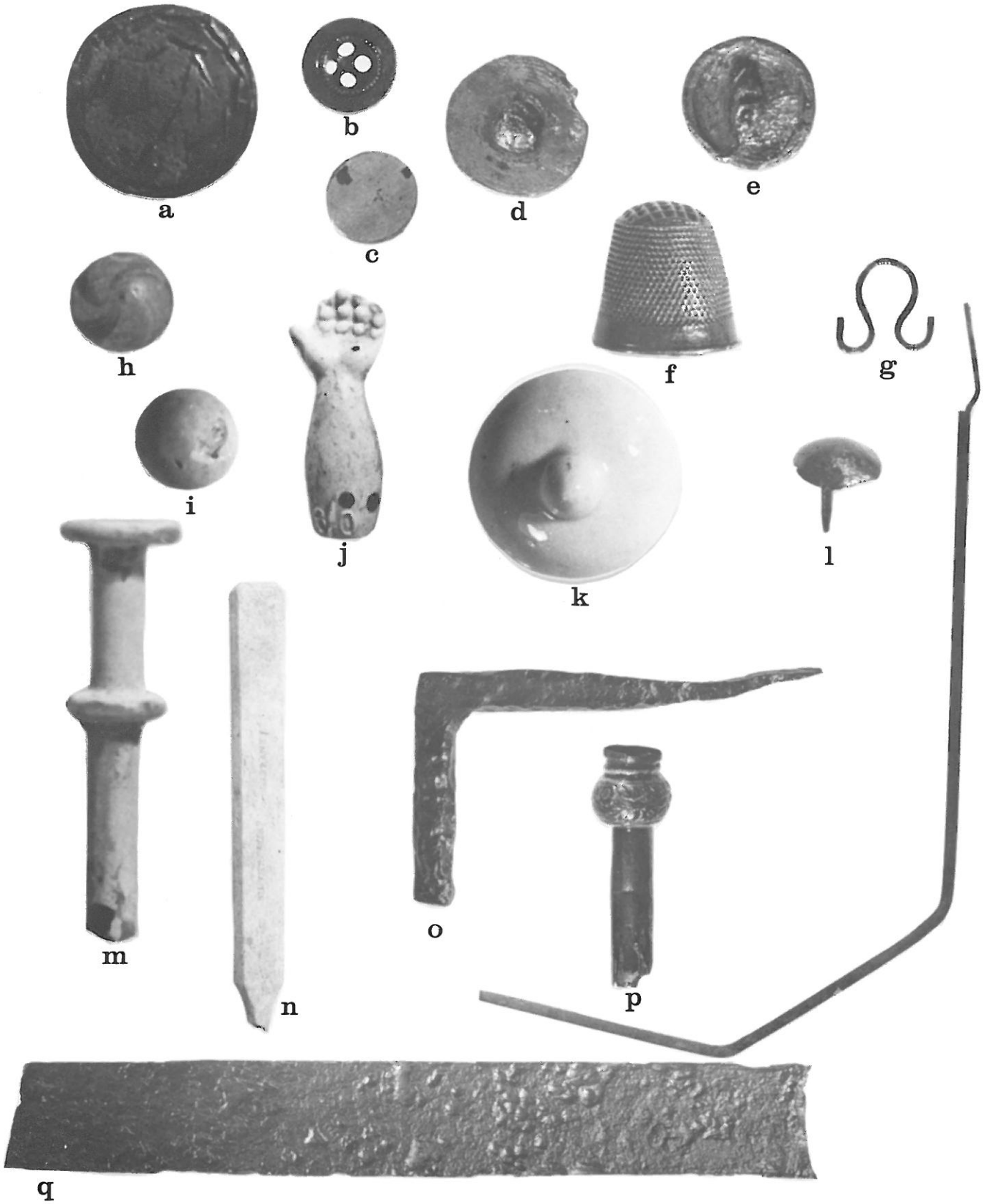


Figure 16: a-d) brass buttons, e) pewter button, f) thimble, g) clothing hook, h) glass marble, i) clay marble, j) porcelain doll arm, k) toy teapot lid, l) brass upholstery tack, m) glass syringe plunger, n) bone toothbrush, o) shutter pintle, p) brass candlestick, q) file, r) umbrella strut.

eighteenth century; they also fashioned buttons out of natural materials such as shell. Pewter buttons, popular at the end of the eighteenth and beginning of the nineteenth centuries, appeared on everybody's clothing, from runaway slaves to white gentlemen (Epstein 1968).

In the pre-1830 assemblage, the largest buttons, one of the non-ferrous and the pewter, had a diamter of 3/4 inch. All distinguishing marks had eroded away. The white porcelain and one of the non-ferrous buttons had a diameter of 1/2 inch; on the back of this non-ferrous one was the word "PLATED." The rest was unreadable. The smallest buttons were the mother-of pearl and a non-ferrous shoe button, both 3/8 inch in diameter. The other clothing items included two straight pins and one dress hook (Figure 16g).

Personal

Only .2% of the assemblage were personal items. One sewing thimble, one flat iron and one toothbrush handle were recovered. The bone toothbrush handle had "SILVER WIRE ... WARRANTY" stamped on one side (Figure 16f,n).

Furniture

The four furniture items, comprising .27% of the pre-1830 assemblage, included three brass upholstery tacks and the top part of a candlestick. The candlestick top would hold a 1/2 inch candle and was decorated with a band of flowers and leaves (Figure 16l,p).

Activities

Besides arms, the activities group accounted for the lowest percentage in the assemblage at .14%. Only two marbles, one made of grey clay and the other of a yellowish brown clay, were recovered.

Post-1830 Assemblage

Kitchen

Kitchen materials were the most abundant remain in the post-1830 assemblage, comprising 70.2%. Ceramics, glass and tin cans share about a third each of the assemblage, at 27%, 37% and 36% respectively. Nineteenth century ceramic types dominated the ceramic assemblage; however, the assemblage did contain early ceramics: one fragment of combed yellow slip ware, seven delft, and one white salt-glazed stoneware sherd.

The majority of ceramics (93.3%) were tablewares. Creamware accounted for 19% of the ceramic assemblage, with all plain sherds except one feather-edged and one spearhead rim sherds. Other specialized tableware types present at one sherd each included jackfield, portobello-like, and a coppery brown earthenware.

Most of the ceramic fragments were pearlware, 26.7%, and whiteware, 27.7%. Transfer printed blue and undecorated pearlware sherds together comprised over half of the pearlware types, 33% and 31% respectively. Other types included annular wares (15% of which 38% were wormy finger painted), hand painted blue (13%), underglazed polychrome (4%), and blue shell-edged (4%). Plain whiteware comprised three-fourths of the whiteware types. These undecorated whitewares increased in popularity as the nineteenth century progressed, and a predominance of such wares is a hallmark of the mid-nineteenth century (Price 1979; Zierden and Hacker 1987). Transfer printed whitewares (15%) included black, purple and blue colors. Two sponge types were recovered (4%), one yellow and one red and black, along with one annular whiteware (2%). The latest ceramic fragments found were four gold decaled whiteware (4%), dating as late as 1930.

Porcelain comprised 13.8% of the ceramic assemblage, 5% more than in the pre-1830 assemblage. However, rather than the majority being the fine Chinese types like in the pre-1830 group, 70% was white, British- or American-made porcelain, of lesser quality than the early types. The few higher quality porcelain was represented by underglazed blue hand painted Chinese (7%) and overglazed polychrome (15%). Other types included gilded white (7%) and purple irridescent (4%).

Utilitarian wares, comprising only 6.2% of the ceramic assemblage, included stoneware, and lead-glazed and unglazed earthenwares. Brown and blue/grey stoneware types accounted for 86% of the stonewares. One brown lead-glazed earthenware handle was recovered along with one unglazed earthenware sherd and five lead-glazed earthenwares.

Glass, the largest kitchen artifact group, was strikingly different from the pre-1830 assemblage. The amount of olive wine bottle sherds decreased from 43% (pre) to 3.4% (post). The bottles were replaced by nineteenth century clear glass bottles (66% of the post-1830 glass assemblage), with most being rectangular in shape. Two clear bottle necks were from "patent" or proprietary medicine bottles. The medicines were marketed for fevers, aches, cramps, or almost any kind of ailment. Sold by "medicine men" (salesmen who traveled across the land, making their sales pitch from street corners or out of wagons), medicines of two types emerged: "specifics" to cure a single disease and "cures" to cure a multitude of illnesses. As the nineteenth century progressed, the patent medicine business prospered until the early twentieth century, when Colliers magazine revealed that most of the medicines contained a high

amount of alcohol, and some, arsenic, opium and morphine. The U.S. government responded with the passage of the 1907 Pure Food and Drug Act, and the patent medicine business soon died (Ketchum 1975).

The name "patent" stems from the King's Royal Patents, first granted in the seventeenth century to inventors of medicinal remedies. In America, however, most "medicine men" preferred to list their status as proprietors rather than patentees because, as a proprietor, one had the exclusive rights in the medicine by simply registering the name of the medicine and its label every 20 years. A patent, on the other hand, expired after 17 years and the name and formula were open to public domain. The name "patent" became common, however, and was applied to proprietary medicines as well as their containers (McKearin and Wilson 1978).

Decorations or designs on the post-1830 clear glass fragments included a molded rim with a beaded edge, a pressed flower design, two pressed square designs, and a pressed wavy line design radiating from a five point star. One half of a clear goblet base was also recovered. Tumbler glass comprised 5% of the glass assemblage.

Milk glass comprised the next largest type of glass (11%) although far below the amount of clear bottle glass. Bottle glass of a variety of colors recovered included blue (5%), green (3%), brown (1%), and two small fragments of "7up" green (.7%). Other table glass included blue (3%) and three fragments of ruby red (1%).

Two hundred fifty-four tin can fragments recovered in the post-1830 assemblage was eight times as many as in the pre-1830 assemblage. Tin cans were in common use by 1860, indicating an increased use of processed and preserved foods. West coast canners continued in specializing in the packaging fish products. By this time, however, not only fish, vegetables and fruits were canned but a variety of meats as well (ducks, geese, turkeys, chickens, beef) (Rock 1984).

Architecture

Architecture comprised 26.6% of the post-1830 assemblage. Similar to the pre-1830 architecture group, flat glass and nails accounted for most of the class, 42% and 53% respectively, although there not such a wide disparity between the two like in the earlier assemblage (11% difference in the post-1830 versus 54% difference in the pre-1830). Other architectural items included the hook of a door padlock, one screw, one nut, one hook, one spring, one large tack, one bolt, one shutter pintel (Figure 16o) and one porcelain wire socket cover. The socket cover is the latest dating artifact in the architecture group and dates to around the 1930s.

Pipes

Few pipe fragments were recovered in the post-1830 assemblage, one-eighth the amount of the pre-1830 assemblage. Two pipestems and one bowl fragment comprised .3% of the overall assemblage.

Arms

Whereas the pre-1830 assemblage had no arms materials, they comprised .6% of the post-1830 assemblage. This included one lead musket ball, one shotgun shell, three pistol shells and one piece of golden brown English flint.

Clothing

Clothing comprised .4% of the post-1830 assemblage and similar to the pre-1830 group, most items (75%) were buttons. The two non-ferrous metal buttons had a 1/2 inch diameter and a 3/4 inch diameter. The smaller one had four holes punched with a bead rim encircling them (Figure 16b). The other button was blue and made of plastic, the new button material of the twentieth century. One side of a non-ferrous metal belt buckle was also recovered.

Personal

Two teeth of a black hard rubber comb and three key fragments comprised the personal category, .5% of the overall assemblage. The rubber comb dates to as early as the 1870s.

Furniture

Furniture accounted for one percent of the post-1830 assemblage. This included only one brass upholstery tack.

Activities

Many more activity articles were recovered in the post-1830 group, comprising 1.4%. One tool, an iron file, recovered still had most of the cutting ridges upon its surface (Figure 16q). Toys included two glass marbles, one with orange, green and blue swirls and one with yellow stripes (Figure 16h-i), and three fragments of doll dishes, made of white porcelain. The third type of toy were six pieces of a blush-colored bisque doll (Figure 16j-k). Bisque dolls, produced commercially in France and Germany since the early 1800s, are labeled today as the "aristocracy of the doll world." The bisque material enabled the dollmakers to create amazingly lifelike facial features. In the late nineteenth and early twentieth centuries, Leon Bru and Pierre Jumeau, two

french doll makers, brought perfection to bisque dolls, creating delicate ears and the blush color in the complexion (Time-Life Books 1978).

Collected Units

The last grouping of artifacts included handpicked samples from the general surface, the backdirt pile made by the construction's workers' backhoe and Test Pit 1, Zone 1 (predominately 20th century artifacts). Since these samples were not systematically collected, the artifacts were not quantified like the previous groups; rather, a description of what was found follows.

Kitchen artifacts included all of the types of ceramics recovered in the units and glass. One hundred eighty-five ceramics ranged from late seventeenth to twentieth century types: 4 delft, 1 combed yellow slipware, 3 salt-glazed stoneware, 1 Rockingham, 13 creamware, 41 pearlware, 50 whiteware, 4 yellowware, and 16 porcelain. Two of the whiteware sherds had distinguishing marks on the backside. One blue tranfer printed sherd had "Germ"; three other plain sherds fit together to form the bottom of a plate with "The Semi Vitreous Porcelain Pottery Company, Wellsville, U.S.A." stamped in and around a shield. The Wellsville Company was established in Ohio in 1879.

One hundred twenty-eight glass fragments recovered included olive, brown, clear and blue bottle glass, clear table glass, milk glass, and green and white sandwich glass. Part of a press glass condiment glass was collected along with part of a molded paneled bottle, and part of a molded lettered bottle. One whole bottle recovered was a patent medicine bottle from the "Creever-Lot Speich Co. Knoxville, Tenn., U.S.A." (Figure 15f).

The architecture class consisted almost entirely of clear flat glass, 50 pieces, and nail fragments, 39. Other architectural artifacts included one piece of industrial glass, one hinge pin, and one large slide bolt. One rifle casing and one piece of lead shot comprised the arms group. Personal items included one plastic toohbrush and one brass umbrella strut (Figure 16r). No clothing artifacts were recovered and only one furniture item, a white porcelain electrical object. The five pipe fragments collected were all stems. The activities group included two marbles, three fragments of a flower pot, one lid to a child's tea service and three doll fragments (two pieces of a bisque doll's head and one porcelain leg fragment).

Table 2
Quantification of the Assemblage

Artifact type	pre-1830 assemblage	post-1830 assemblage	Collected units
Kitchen			
Porcelain, white	7	19	11
Porcelain, irridescent		1	1
Porcelain, Oriental b/w	15	5	1
Porcelain, Oriental overg.	2	3	
Porcelain, gilded white		2	
Porcelain, English			1
Stoneware, brn. sgs	5	5	1
Stoneware, white sgs	1	1	2
Rhenish	2	1	
Nottingham	1		
Creamware, plain	86	35	
Creamware, hand paint	3	1	
Creamware, tr.print	2	1	
Pearlware, plain	21		12
Pearlware, blue h.p.	2	16	11
Pearlware, shell edge	9	2	2
Pearlware, scratch blue	4		
Pearlware, annular	18	8	6
Pearlware, poly h.p.	1	2	1
Pearlware, tr. print	22	17	9
Whiteware, plain	5	39	33
Whiteware, tr.pr blue	5	2	
Whiteware, tr.pr other	2	6	1
Whiteware, sponged		2	
Whiteware, Annular		1	
Whiteware, gilded		4	
Whiteware, decaled			1
Yellow ware			4
Rockingham ware			1
Slipware	12	1	1
Lead glazed ew	4	7	
Blk. lead gl.	5		
Colono ware	5		
Luster ware	1		
Canary ware	1		
Portobello	1		
Whieldon ware	1		
Jackfield		1	
Delft	2	7	4
unglazed ew	2	1	
Clear bottle gl.	15	168	20
brn. bottle gl.	2	3	5
green bottle gl.	60	16	14
blue bottle gl.	3	13	3

	pre-1830	post-1830	collected
blue-green bottle	8	1	
sprite green gl.	1	2	
milk glass	1	1	6
table glass	2	26	3
ruby red glass		3	
medicine bottle		2	3
tin can	31	254	
Architecture			
window glass	756	113	50
nails	225	143	39
door hook		1	
nut		1	
spring		1	
sewer pipe		3	
porcelain insul.		1	
hinge pin			1
sliding bolt			1
tack		2	
spike	1		
Arms			
musket ball		1	1
flint		1	
pistol bullet		3	
shotgun shell		1	
rifle casing			1
Clothing			
brass button	2	1	
plastic button		1	
pewter button	1	1	
porcelain button	1		
shell button	1		
belt buckle		1	
hook	1		
straight pin	1		
Personal			
comb		2	
key frag		3	
toothbrush	1		1
thimble	1		
umbrella strut			1
Furniture			
tack	1	1	
candlestick	1		
Pipes			
stems	18	2	1
bowl	6	1	

	pre-1830	post-1830	collected
Activities			
marbles	1	2	1
doll head		6	4
glass syringe		1	
file		1	
doll dishes		3	1
flower pot			3

CHAPTER V

INTERPRETATIONS

The Data Base

Since the beginning of this decade, archaeological research in Charleston has been guided by a series of long-term research goals. These research topics were formulated through archival research. This two year study served as an initial archaeological survey of the city, and was used to predict site location, type of activity, and length of occupation throughout the city (Zierden and Calhoun 1984; Calhoun et al. 1985). A second study focused on the city's suburban development (Rosengarten et al. 1987). Research focused on documentary evidence of the formation of human adaptive patterns, and the ways in which the patterns are manifested in the community and reflected in the ground (Deagan 1983:13-14). These include:

1) information relevant to an understanding of social variability in the city, such as population demography, occupations, income ranges, social and ethnic classes.

2) information relevant to the material world and economy of Charleston. This includes studies of Charleston's economic system, its position in the world economy, the range of activities in the commercial sector of Charleston's population, descriptions of the range of imports available to the city's citizens, the local production of goods, and the mechanisms and manifestations of distribution and exchange in the city.

3) information relevant to the physical formation of the archaeological record. This includes information on the physical landscape of Charleston, such as patterns of growth and development, location of different activity areas, and the nature of the physical environment prior to intensive utilization. Physical contributions to the record such as architecture and building construction methods, cultural and natural disasters, disposal and sanitation practices, and public works are also important.

The proposed research topics address a number of issues, both descriptive and processual. Several of these were proposed from the archival studies (Rosengarten et al. 1987; Zierden and Calhoun 1984), while others were developed by scholars working in Charleston and other cities (for example, Cressey et al. 1982; Honerkamp and Council 1984; Lewis 1984; Reitz 1986). Data from subsequently excavated sites have been utilized to examine these issues, whenever appropriate. Research topic selection is based on the scale of the project, as well as the temporal and

functional affiliations of the site. The unified research approach gives weight to small projects such as 66 Society, as each project, regardless of scale, enlarges the Charleston data base.

To date, fourteen sites comprise the Charleston data base. These are utilized in the present study for comparative purposes, both individually and in groups. Initial archaeological efforts focused on sites within the historic city core. These sites were dual function residential-commercial properties, characterized by intense use, several episodes of rebuilding, changing property lines, and use as rental property for a variety of activities. They were occupied since the early eighteenth century. The five residential-commercial sites include McCrady's Longroom (Zierden et al. 1982), Lodge Alley (Zierden et al. 1983a), First Trident (Zierden et al. 1983b), Atlantic Wharf (Zierden et al. n.d.), Beef Market (Calhoun et al. 1984), and Charleston Place (Honerkamp et al. 1982; Zierden and Hacker 1987). Data from these sites have been lumped to form an artifact profile termed the Dual Function Profile.

In 1985, Museum research expanded to include residential-only sites built in Charleston's late eighteenth and early nineteenth century suburbs. Four sites are grand townhouses of wealthy Charleston merchant-planters; these include the Aiken-Rhett Mansion (Zierden et al. 1986a), the William Gibbes House (Zierden et al. 1987), the John Rutledge House, and the Miles Brewton House (reports in progress). These have been grouped to form the Townhouse Profile (Zierden and Grimes 1988). Two other suburban residential sites have been investigated; President Street is located on the western side of the Neck (Zierden and Raynor 1988), while the Visitor's Center is located on the East Side (Grimes and Zierden 1988). Both sites are presumed to be middle class, and are thus directly comparable to 66 Society. They were, however, settled slightly later. These sites were used to investigate the various topics discussed below.

Establishing Temporal Parameters of the Site

Documentary evidence indicates that the 66 Society lot was part of a land grant in 1696. Development of the land did not occur, however, until 1747 when the area was surveyed and subdivided. Between 1795 and 1838, historical records indicate that one house, and possibly two, were constructed on the 66 Society lot. One house burned in the 1838 fire and was replaced by the extant house. The analytical tools of Terminus Post Quem (TPQ), stratigraphic point of initiation, and South's Mean Ceramic Date Formula (South 1972) were used to determine the date of deposition for the 66 Society proveniences.

Examination of the archaeological record shows a strong pre-1830 component. Using TPQ and stratigraphic point of initiation, six proveniences predate the extant house and contain 53% of the

artifacts recovered. The mean ceramic date (South 1972) for the proveniences is 1796, supporting the historical evidence of a house on the lot by 1795.

Comparison of the Carolina Artifact Pattern (South 1977) to the pre-1830 66 Society artifact profile reveal an inverse relationship in the amounts of kitchen and architecture artifacts (Table 3), suggesting different activities and/or site formation processes during the two occupations. The high percentage of architectural material in the pre-1830 assemblage may be the result of the house burning in the 1838 fire; all architectural materials became part of the archaeological record. In contrast, the post-1830 assemblage exhibits a reduced architecture group. The structure occupied during this period is still standing. The dramatic differences in the artifact profiles underscores the interpretation of two distinct occupations. The archaeological evidence supports the interpretation of two separate occupations, together spanning the entire nineteenth century.

Site Formation Processes

Investigation of site formation processes has been central to ongoing archaeological research in Charleston. In order to properly interpret an archaeological site, it is first necessary to understand the processes responsible for the formation of that data base. In an urban situation, this is not always easy. Because of the frequently intense and continuous use and reuse of most urban lots, the stratigraphic record is often an unbelievable jumble of deposits. Urban archaeologists have been chided for searching in vain for "layer cake sites" and criticized for not developing methodologies compatible with the real urban situation (Honerkamp and Fairbanks 1984:65).

Cultural materials are introduced into the ground by three basic methods; discard, loss, and abandonment (Schiffer 1977). In certain cases, we have been able to distinguish deposits resulting from these three depositional processes. Once in the ground, they can be redistributed, or they can be removed (Ascher 1968; Honerkamp and Fairbanks 1984; Schiffer 1983). Usually, the archeological record is a combination of all three events. In the urban situation, where these processes can become very complex, archaeologists are particularly interested in the processes which introduce and redistribute materials.

Continuing research suggests that sheet midden, or zone deposits, are characteristic of rural sites, particularly farm or plantation sites. This pattern has been noted on plantation sites in coastal Georgia (Singleton 1980) and South Carolina (Drucker and Anthony 1979; Zierden and Calhoun 1983; Zierden et al. 1985; 1986a). Another common depositional practice during the colonial and antebellum periods seems to have been the use of adjacent swamps and marshes for refuse disposal. Features, while present on these sites, often contained sparse materials. With the availability of large, open areas, rural residents were able

to deposit refuse on the ground surface, or in lowlying areas, a convenient distance from the habitation area. The extensive excavations at Daniels Island revealed the prevalence of this practice, but also revealed large, refuse filled subsurface features, including a well and abandoned brick foundation (Zierden et al. 1986b).

Although there is considerable overlap, reuse of subsurface features for refuse disposal appears to be more common on urban sites. The backyard area was the locus of refuse disposal. Although some refuse was scattered on the ground as sheet midden, much of it was deposited into features such as wells and privies. This was probably done in response to the relatively crowded urban conditions and resulting health considerations.

Crowded conditions and health considerations also resulted in the deposition of refuse in any convenient space in the city. Open lots, unpaved streets, and alleys were likely candidates (Calhoun et al. 1984; Zierden and Calhoun 1983a; Rosengarten et al. 1987). Quantities of refuse were also dumped into creeks and lowylying marshy areas, creating viable real estate (Zierden and Calhoun 1986; Zierden et al. 1983b).

Urban archaeological deposits reflect abandonment and loss, as well as discard. Abandonment activities include loss of materials due to fire and storm, and the resulting cleanup activities, or the exchange of property between tenants and owners (Zierden and Hacker 1987; Lewis and Haskell 1981). Another key aspect of the urban site may be disorganization, the result of continuous reoccupation and the intrusion of later deposits into earlier ones. Additional factors unique to urban sites are private or municipal collection of refuse, (i.e., removal of refuse by scavengers, and later municipal crews, which resulted in the redeposition of refuse far from its place of origin), and the replacement of private handling by municipal or corporate management of such basic needs as water procurement and storage, sanitary waste management, and trash disposal (Honerkamp and Council 1984; Zierden and Calhoun 1986; Rosengarten et al. 1987).

Sixty-six Society provides evidence of many of these processes. Zones 1, 2, and 3 suggest that at least some refuse was discarded or lost in the open yard. The limited archaeological evidence, however, suggests that large subsurface features were a more common method of refuse disposal. Features 2, 4 and 5 are all large pits containing dense refuse. It has been suggested that the congestion of the urban environoment led to an increased use of recycled subsurface features for refuse disposal. This problem was relieved with varying degrees of off-site disposal, ranging from informal trash deposition in a nearby marsh to municipal hauling of refuse to a designated city dump. Most of the suburban sites studied to date have been located near areas of marsh that were actively and gradually filled during the nineteenth century. Gibbes and President Street were adjacent to waterfront expanses, while Aiken-Rhett, Brewton, and Visitor's

Center were adjacent to or located on one of the many small creeks which bisected the peninsula.

The present cumulative data suggest that nearness to low land may affect refuse disposal practices in the city. Obviously, this cannot be proven archaeologically. It is not possible to excavate these areas of marsh and discern individual households. Likewise, it is also impossible to document the amount of off-site refuse disposal. It is only possible to assess on-site discard behavior. In this regard, 66 Society appears to be a heavily utilized site. The intense use of trash pits for domestic refuse stands in contrast to the other suburban sites. The Visitor's Center lot evidenced a number of small pits, but the artifact content was sparse. The Miles Brewton and Aiken-Rhett sites contained large pits, but these were filled with construction rubble rather than kitchen refuse.

The physical formation of the archaeological record reflects the urban condition, and many cultural conditions triggered these processes. Refuse disposal practices developed in response to the relative congestion of the city in general and the individual lot in particular. Less tangible, but no less important, factors were the availability of off-site refuse disposal and access to adjacent lowlands. As the first small suburban lot, 66 Society has made an important contribution to the accumulating evidence of site formation processes.

Artifact Patterning and Site Function

To date, all of the Charleston assemblages have been quantified by grouping the artifacts into functional categories, according to South's methodology (South 1977). Under this technique, artifacts are grouped by their presumed function in the daily affairs of the site occupants. By utilizing data from a number of British colonial sites, South proposed a range of variability that can be expected for the frequency percentages of artifact classes and groups. He named this range of variability the Carolina Artifact Pattern; this pattern is presumed to represent an averaging of domestic behavior. By establishing the range of normal variation, it should be possible to recognize aberrant activities as variations from these ranges.

South has warned that archaeologists should go beyond mere pattern recognition to the explanations of processes of cultural systems that result in these patterns (South 1988). The profiles presented here are organizational, descriptive tools; however, these profiles are then used to examine the processes of urbanization. One aspect of urbanization was the eventual separation of home and workplace. The elucidation of site function patterns relative to temporal affiliation is a first step in the archaeological investigation of these processes.

Comparison of assemblages from mixed residential-commercial sites to the Carolina pattern is shown in Table 3; the mean for

Table 3

Comparison of 66 Society Assemblages
to Composite Artifact Profiles

	% Pre-1830 Assemblage	% Post-1830 Assemblage	% 19th-Century President St.	% 19th-Century VRTC	% Townhouse Profile	% Dual-Function Profile	% Carolina Artifact Pattern
Kitchen	29.65	70.2	62.24	62.7	58.38	63.10	63.0
Architecture	67.47	26.6	32.08	32.4	36.00	25.03	25.5
Arms	.00	.6	.26	.06	.32	.20	.5
Clothing	.62	.4	1.51	.5	.91	1.18	3.0
Personal	.20	.5	.20	.2	.24	.14	.2
Furniture	.27	.1	1.42	.2	.21	.08	.2
Pipes	1.65	.3	.86	.5	2.79	5.97	5.8
Activities	.14	1.3	1.16	3.5	1.10	4.14	1.7

these sites, which include the homes and businesses of merchants and craftspeople, reflects a general conformity to the Carolina pattern. The major difference is in the activities group, which averages 4.14 percent for these sites, compared to 1.7 percent for the Carolina pattern.

Research on these sites has suggested that commercial enterprises that transfer, rather than produce, goods (such as retail shops) are likely to produce little in the way of byproducts which would be recovered archaeologically. In contrast, sites characterized by craft oriented, or combined craft-domestic occupations appear to generate at least some discarded byproducts indicative of site function (Lewis 1977:177; Honerkamp et al. 1982:17,145-155; Honerkamp 1980; Zierden and Hacker 1987). The slightly elevated activities group, then, is evidently a strong reflection of commercial activity at these sites.

In contrast, data from Gibbes (Zierden et al. 1987) and Aiken-Rhett (Zierden et al. 1986b) were used to derive a pattern for domestic-only sites. These elite townhouses are comparable to 66 Society in that they were both suburban and were first occupied in the late eighteenth to early nineteenth centuries. Further, the three sites experienced no major rebuilding episodes. These sites revealed an activities group even lower than the Carolina pattern. This is not necessarily unexpected; other researchers have noted that the empirical artifact profiles South used in establishing the Carolina pattern were actually derived from assemblages of combined domestic-craft sites. Therefore, domestic only refuse, from whatever sources, should exceed the mean for domestic artifact classes; the kitchen, clothing, personal, and furniture classes (Honerkamp et al. 1982:147-157).

The 66 Society site is documented as a residential-only property. Comparison of the artifact profiles with other residential sites and the dual function profile should serve to strengthen the dual function model. The artifact profiles are shown in Table 3. As expected, the 66 Society assemblage was in closer agreement with the townhouse profile and the Carolina Pattern than the dual function profile. The lower percentage of pipes reflects a temporal shift in the popularity of these items, while the variation in kitchen and architecture between the pre-1830 and post-1830 subassemblages reflects the various site formation processes (a burned structure versus a standing structure). The lower percentage in the activities group reflects a lack of craft or commercial activities at the site.

The middle class residents of 66 Society evidently worked away from their place of residence. The separation of home and workplace was a major nineteenth century social change, and is closely associated with the development of modern urban life (Wall 1985:185). In eighteenth century Charleston, as in other cities, the "organization of the productive unit consisted of the internal integration of house and shop and living and working

space among merchants and artisans. Their clerks, journeymen, and apprentices either lived with their employees or boarded nearby" (Wall 1985:185; see Nash 1979). By the late nineteenth century, the two were no longer integrated, and in some cities separate socioeconomic neighborhoods had emerged (Wall 1985; Warner 1962, 1968). The household changed from " a unit of economic production to one only concerned with consumption and social reproduction" (Wall 1985:185). Social relationships were enhanced by the spatial concentration of the "walking city", one small enough for pedestrian traffic to be practical (Radford 1974; Wall 1985; Warner 1962, 1968). This spatial arrangement was not static, and a number of changes, industrial, technological, and social, occurred throughout the nineteenth century which allowed physical expansion to occur. Though its finite water boundaries limited such expansion in Charleston, industrial growth and the development of the Neck suburbs reflects these changes. The antebellum suburbs, such as Ansonborough, in contrast to the lower city, were overwhelmingly residential.

Socioeconomic Status

The investigation of class differences, or socioeconomic status, has been a central concern of historical archaeologists in recent years (Binford 1972). Pioneering investigations of the archaeological manifestations of status have focused on southern plantation sites (Drucker 1981; Lewis 1985; Orser 1988; Otto 1977) and Spanish colonial sites (Deagan 1983), where occupants of the site, and their social and ethic affiliations, are known.

Urban centers are characterized by distinct social groups living and interacting within a prescribed area. For this reason, status studies are an important aspect of urban archaeological studies (Baugher and Venables 1987; Garrow 1987; Shepard 1987; Spencer-Wood 1987). A major problem with status studies in Charleston has been a lack of specific documentary information on site inhabitants, and the inability to associate individual site contexts with specific occupants (Zierden and Calhoun 1987). Exceptions to this are the Aiken-Rhett, Gibbes, Rutledge and Miles Brewton sites, federal/antebellum townhouses owned and occupied by wealthy and prominent planter-merchants. (Historical archaeologists have long recognized the bias in the documentation of white, wealthy, male history to the neglect of other groups in this country [Glassie 1977]). Excavations at the four elite townhouse sites in Charleston have provided data for a preliminary model of suburban residential land use by the Charleston elite and the material correlates of high status within an urban setting in the late eighteenth and early nineteenth centuries (Zierden and Grimes 1988). These data have also been compared to the one known lower status site of the same time period, Lodge Alley (Zierden et al 1983a).

Based on this model, status should be reflected in four aspects of the archaeological record: patterns of material

culture, diet, housing, and site location. Comparative data suggests that site location was a conscious, value-laden choice, deliberately made for a number of reasons, one of them being status related. For example, wealthy planters chose suburban lots for their relative spaciousness and access to "healthy breezes." House and lot size choices were made on the basis of the owner's buying power, and wealthy houses were concentrated on wide, major thoroughfares. With street frontage the prized commodity in Charleston, upper status lots are two to four times wider than lower or middle status site lots.

The material culture, another status indicator for the elite sites, reflects their elegant (and thus, costly) lifestyle in the late eighteenth/early nineteenth centuries. Artifact groups and types examined for clues to socioeconomic status include architecture, kitchen, clothing, furniture and personal items. Kitchen items include glassware and tableware of which higher percentages of porcelain and transfer printed ceramics, and decorative table glass relative to the other kitchen items are most indicative of high status. The high percentage of architectural items in the upper status sites reflects more substantial housing and greater attention to building maintenance, as well as additions and improvements (Lewis 1985). This percentage can be influenced by site formation processes, as seen in the contrast between the 66 Society subassemblages.

Status should also be reflected in clothing, personal, and furniture items. Research on lower status sites reveals a dearth of personal or luxury items, with an emphasis on subsistence and shelter (kitchen and architecture) (Singleton 1980; Trinkley and Caballero 1983). Wealthy people, in contrast, would have had large proportions of these items. However, we may not see these items in the archaeological record since most would have been highly curated and rarely discarded. Rather than looking at the percentages of these artifact groups, we may have to simply examine individual items that comprise the groups for clues to socioeconomic status.

Sixty-six Society is the first middle status, domestic household with a late eighteenth/ early nineteenth century component investigated archaeologically in Charleston. Comparing the upper and lower status sites to the 66 Society pre-1830 component, the 66 Society percentages fall between the two (except the architecture percentage) which reinforces the presumed middle status for the site (Table 3). The extremely high percentage of architecture is skewed because of the burning of the original structure at 66 Society whereas the other sites still contain their original buildings.

Research at nineteenth century sites, including the VRTC site (Grimes and Zierden 1988), the President Street site (Zierden and Raynor 1988) and the 66 Society Street site indicate that the material correlates of status for sites of the late eighteenth/early nineteenth centuries are inappropriate to use for the determination of status at the nineteenth century sites

(Table 4). With the rise of industrialization in the nineteenth century, the mass-production of goods, which increased availability and lowered costs, allowed different social groups access to what was previously considered elite goods. One reason given for lower status groups wanting elite goods is the process of emulation, where material items associated with an elite are purchased by non-elites to improve their position in the social group (Miller 1982).

Up until the nineteenth century, the presence of Chinese porcelain is considered an indicator of high status in the United States (Stone 1970:88). However, during the nineteenth century, porcelain was directly imported into the United States in enormous quantities; the ware became less expensive and its quality deteriorated sharply. Thus, the recovery of Chinese porcelain from a nineteenth century site is not a reliable indicator of high financial status (Herman et al. 1975:66; Lewis 1978:104). At the same time, less expensive American- and British-made porcelains are also introduced into the market (Kovel and Kovel 1953).

The overall percentage of ceramics relative to other kitchen items declines as the nineteenth century progresses due to an increase in the production of glass products and the development of other storage containers using metal materials, such as tin cans. In the mid nineteenth century President Street site assemblage, ceramics comprise 60% of the kitchen group and glass, 40%. By the late nineteenth century, the proportions are inverted with ceramics comprising only 25% of the kitchen group and glass, 73%. Tin cans appear in the later assemblage at 2%. The pattern is reinforced by the 66 Society data and the VRTC data. In the 66 Society pre-1830 kitchen group, ceramics comprise 61% whereas glass equaled 32% and tin cans 7%. But in the post-1830 kitchen group, ceramics form the minority of kitchen artifacts at 27% with glass and tin cans comprising the majority at 37% and 36%, respectively. In the VRTC nineteenth century assemblage, ceramics constitute 25% of the kitchen group, glass, 69%, and tin cans, 6%. A predominance of glass (82%) and minimal amount of ceramics (13%) in the VRTC twentieth-century assemblage indicates that the pattern continues into this century.

With an increase in glass products, the relative percentages of table glass increase also in nineteenth century sites. The percentages of table glass in the post-1830 occupation at 66 Society Street site (4.1%), the VRTC site (4.9%), and the President Street site (3.55% - an overall average for both nineteenth century assemblages), are all greater than the elite suburban federal/antebellum townhouse mean (2.32%). Once again we see that temporal differences in Charleston sites are a major factor in discerning socioeconomic status indicators. Whether or not table glass could continue to mark status differentiations in the nineteenth century (i.e. that upper status sites would have an even greater percentage of table glass than the above mentioned sites) is unanswerable at this time since no mid to late nineteenth century upper class sites have been investigated

in Charleston to date. It is suspected, however, that with the increased availability of table glass, types of table glass (such as crystal) rather than an overall percentage of table glass will have to be examined for indicators of socioeconomic status.

The overall percentage of clothing, personal and furniture groups for the 66 Society post-1830 occupation falls between the percentages for VRTC and President Street (Table 4). This grouping is highly variable in the nineteenth century and as previously mentioned, we may have to simply look at the individual items within these groups for clues to socioeconomic status. Unfortunately, for 66 Society, the furniture tack, buttons, comb and key fragments recovered could have belonged to members of any class and do not provide any socioeconomic clues.

The post-1830 66 Society artifact assemblage is similar to the President Street assemblage and the VRTC nineteenth century assemblage, all interpreted as representing middle class status. More information is needed to discern the material correlates of nineteenth century Charleston status. Research at the three sites has produced a data base for which refined questions about socioeconomic status can now be addressed. We have a clearer understanding of the effects of temporal differences on sites in Charleston. Investigations of upper and lower status mid to late nineteenth century sites are necessary for comparative data to address questions about socioeconomic status in Charleston in the nineteenth century.

TABLE 4
Percentages of Material Correlates of Status Indicators
for Late Eighteenth/Nineteenth Century Sites

	Porcelain/Transfer Printed Wares (% of ceramics)	Table glass (% of kitchen)	Architecture	Clothing, Personal, Furniture
Late 18th/Early 19th Sites:				
Townhouse (upper status)	21.97	2.32	36.0	1.36
Lodge Alley (low status)	9.00	.04	17.8	.88
66 Society, pre-1830 (middle status)	18.8	.69	67.47	1.09
19th Century Sites:				
66 Society Street -post-1830 component	19.4	4.10	26.6	1.00
VRTC	26.8	4.90	32.4	.80

President Street				
-mid 19th century component	22.0	1.00	31.0	1.62
-late 19th " component	29.3	6.10	33.1	4.64
-combined	24.5	3.55	32.1	3.13

Spatial Patterning

As anthropologists, archaeologists have used spatial patterning, the arrangement of people, resources, and institutions across the landscape, to explore social structure and social organization. In cities, changes in social structure are consistent with urbanization, and these changes are reflected in land use. It is assumed that land will be used with increasing intensity and specialization as the community becomes more urban (Rothschild 1985:163). Increasing urbanization will in turn result in physical changes in the landscape (Mrozowski 1987:3).

Rothschild (1985) has suggested that urbanization is reflected in the degree to which land in a community is formally integrated into that community by being built upon or defined in some other formal way. Such processes in Charleston, and elsewhere, include landfilling, construction of drainage and other municipal systems, separation of home and workplace, and increasing regulation and attention to daily needs, such as water procurement, livestock maintenance, food procurement, and sanitary waste management (Calhoun et al. 1984; Honerkamp and Council 1984; Mrozowski 1987; Rosengarten et al. 1987; Sapan 1985; Wall 1985; Zierden and Hacker 1987).

The spatial patterning of Charleston, particularly on the individual site level, reflects the particular demands of the urban environment. During the eighteenth and nineteenth centuries, most of the structures found dispersed across the rural plantation site were also crammed onto the constricted urban lot (Castille et al. 1982:5; Wade 1964:61; Rosengarten et al. 1987). Urban compounds, particularly those located within the commercial core, were organized to make the most efficient use of available land.

Lots were deep and narrow, to maximize the available street frontage. Houses fronted directly on the street, with the narrow end facing the road. The southern side was open, complete with piazzas, while the northern side was devoid of openings, allowing residents to take full advantage of prevailing breezes while maintaining maximal privacy. Two English architectural styles adapted to semi-tropical conditions in the Caribbean proliferated in the city and became famous as the Charleston single house and the Charleston double house (Calhoun 1986; Severens 1988; Weir 1983). The single house received its name from its one room width. Typically the single house contained two rooms to a floor, with a hall between containing the staircase, and a piazza to the south or west. The gable end fronted the street, and

entrance was through a false front door onto the piazza. Later, this plan was modified slightly; the entrance was placed on the northern side of the house, resulting in a suite of rooms along the south side (Rogers 1980:66). As its name suggests, the double house contained four rooms to a floor, with a central hall, and was often grander than the simpler single house. The larger Charleston houses, particularly the double houses, were often elevated, with an above-ground basement; the second floor was then the first living floor. This served to catch prevailing breezes, and to "distance" the occupants from public streets (Coclanis 1985:612; Weir 1983). The first floor of Charleston houses often contained a business, while residents lived on the upper floors; this was particularly common in the commercial core.

Behind the main house, auxiliary structures were arranged within a fenced compound, and often included slave quarters, kitchen, stable, well at mid-lot, and privy in a rear corner. Gardens, both ornamental and functional, might be planted and livestock might be kept. While there was some variation in the size, content, and arrangement of these structures, they were considered basic functional components of urban life, and were present in some form. The urban compounds of the wealthy often contained substantial brick structures for all of these functions (Zierden et al. 1986b; 1987). The properties of less affluent residents might contain less substantial structures, or fewer outbuildings; such residents owned fewer horses and fewer, if any, slaves, for example. More than one household might share privies, wells or passageways (Zierden and Hacker 1987:99).

This fairly static pattern can serve as a basic outline of lot element patterning in Charleston, but continuing research on residential-only sites suggests that this pattern evolved through the eighteenth to mid-nineteenth centuries. Architectural and archaeological investigation at the Miles Brewton house, for example, suggests fewer outbuildings and a less formal arrangement of structures than is currently reflected. In particular, the imposing brick walls which surround the urban compound and, in the case of Brewton, separate the working yard from the formal gardens, appear to be an early nineteenth century addition. Refuse disposal was initially concentrated near the outbuildings, but these areas were later paved in an attempt to keep them cleaner.

Spatial patterning on suburban sites is somewhat different from that of the commercial core. Most of these sites served only as residences, with the site occupants commuting to work in the commercial core or, in the case of wealthier citizens, deriving income from plantations and a variety of enterprises. Lots were often more spacious, and their size tended to remain constant. In contrast, lot dimensions in the commercial core changed constantly.

The lots at Charleston Place, central to the nineteenth century business district, were initially long and narrow. Over

the years, they were continually subdivided to a point where the majority measured 30 feet in width, but were over 200 feet long. In contrast, wealthy suburban townhouses examined archaeologically were between 80 and 150 feet wide and over 250 feet deep. Lots in Charleston tended to be a standard depth; street frontage was the valued commodity, and the width of the lot reflected the buying power of the owner.

The Ansonborough blocks are relatively small, necessitating shorter lots. Lots along Society Street were further shortened by the establishment of longer lots along the perpendicular streets, Meeting and Anson, which extended to the center of the block (see Figure 7). Sixty-six Society retained its original dimensions of 45 by 127 feet from its initial subdivision in the late eighteenth century to the present day.

The construction of a main house and outbuildings at 66 Society left little room in the yard for other activities. Archaeological evidence suggests that what in essence was the center of the yard was the scene of refuse disposal, in contrast to the more spacious suburban lots where refuse disposal was relegated to a working section of the yard.

The 66 Society Street lot contained fewer support structures than the upper status townhouse lots. The number and configuration were, however, comparable to lots at President Street and Visitor's Center (Figure 17). The current configuration contains a stable/carriage house and small kitchen as well as main house, aligned along the eastern side of the property. Late nineteenth century plats indicate that from time to time the property also contained a small shed and privy. It appears that the occupants shared a privy with #64 Society at one point (see Figure 8). The number and configuration of these support structures suggest a middle class status for block residents.

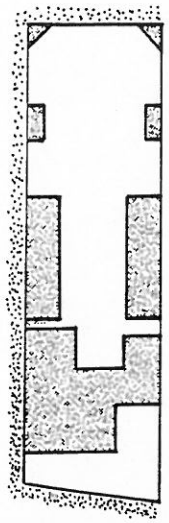
While suburban land use differed from that of the lower city, individual lots were laid out in similar ways. Responding to the same daily needs and confined to a comparable amount of space, residents of Ansonborough turned their single houses sideways, built kitchens and stables behind them, and put as much distance as possible between their wells and privies. Where possible, refuse disposal and other maintenance activities were segregated in certain portions of the yard. The 66 Society site has informed on additional aspects of urban spatial patterning and, when compared to President Street, Visitor's Center, and the townhouse sites, provided a model of middle class lot element patterning.

Subsistence Strategies

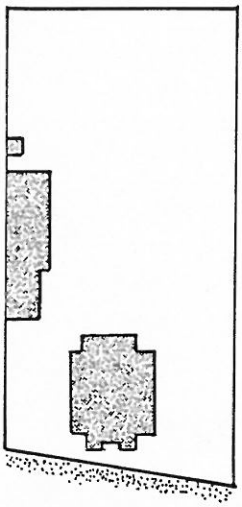
Investigation of subsistence strategy is an important aspect of archaeological research in Charleston. Since 1982, consistent

Relative Lot Size and Structure Distribution

19th Century Charleston

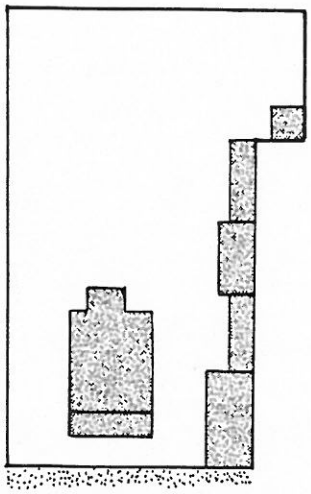


Aiken–Rhett



Gibbes

John Rutledge

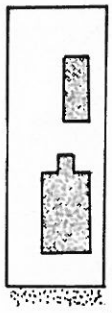


Miles Brewton

Upper class suburban residential

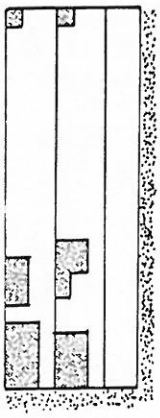
66 Society

President Street

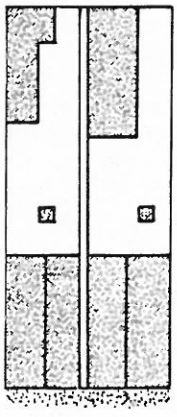


VRTC Meeting Street

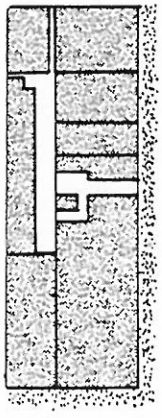
Middle class suburban residential



1808



1850

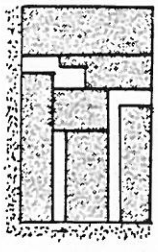


1902

Charleston Place

city core commercial–residential

(multiple lots)



McCrady's Longroom

methods have been applied to the recovery and analysis of faunal and botanical remains. These have been used to address a number of research problems, including cultural conservatism, adaptation to local environments, resource utilization, ethnicity, and social variability.

Research on subsistence practices on the Southeastern Coastal Plain has been aimed at delineating a regional pattern of animal utilization, using vertebrate remains from a variety of sites (Reitz 1979; Honerkamp and Reitz 1982; Reitz and Honerkamp 1983, 1984; Reitz and Scarry 1985). The pattern is characterized by heavy dependence on beef, and utilization of a variety of wild species indigenous to the local environment. This archaeological model is in contrast to the documentary evidence, which suggests a heavy dependence on pork (Genovese 1974; Hilliard 1972; Gray 1933). The model is also in contrast to the traditional Old World English diet (Anderson 1971; Reitz and Honerkamp 1983). The Charleston data fit the model of resource utilization for the southeastern Coastal Plain (Reitz and Honerkamp 1984).

Recently, subsistence research has focused on two topics, with promising results. The first is rural-urban contrasts. Based on research on a number of sites, it appears that there are basic dietary differences between rural and urban sites, which cross-cut temporal, ethnic, and social boundaries (Reitz 1986). Urban citizens relied more heavily on domestic fauna, mammals and birds, than did their rural neighbors, most likely because of the function of the market in the urban setting. Domestic meats may have been more available to urban citizens because of the market (Calhoun et al. 1984). In contrast, wild game would have been more difficult to obtain for the average urban citizen. Wild game was more easily obtained by rural citizens, while domestic fauna would have been available less often. Data from recently excavated sites, including Aiken-Rhett, Gibbes (Ruff 1987), and Charleston Place (Carder 1987) all conform to this model. Although data is less extensive, similar trends are noted in botanical remains. Wild plant foods are extremely rare in urban samples, while cultigens such as corn and wheat have been noted (Trinkley 1987; Trinkley et al. 1985).

Another trend emerging from this recent research involves indicators of socioeconomic status (Reitz 1987; Ruff 1987). Zooarchaeological research on sites in the Southeast indicates that diet is sensitive to status (Reitz and Cumbaa 1983; Schultz and Gust 1983). High status should be reflected in a diet that was varied, expensive, or difficult to maintain. Domestic fauna appear to be the mainstay of the urban diet, while wild taxa provided variety.

Faunal data from Gibbes, Rutledge, and Aiken-Rhett (Ruff 1987; Reitz 1988; Zierden and Grimes 1988) conformed to this model. All were heavily dependent on domestic fauna, primarily cow, and have higher percentages of caprines, which are rare on other Charleston sites. The elite diet was quite diverse, and contained a large amount of wild taxa, including estuarine and

offshore fishes and wild birds. Alligator was recovered from the Aiken-Rhett site, and the three sites contain a number of turtles, all of which were considered delicacies (Rogers 1980). While these sites exhibited greater diversity in food animals, they also contain a lower amount of commensal taxa, suggesting the financial and physical ability to provide a more sanitary environment. Another marker of upper class faunal assemblages is the presence of sawed and sliced bones in eighteenth century contexts, suggesting that the use of individual cuts of meat prepared with a saw may have begun as an upper class habit. Basically, wealthy Charlestonians enjoyed a diet that was expensive; expense may be considered in terms of time invested, as well as money invested (Reitz and Cumbaa 1983).

The diet of the middle class is not nearly so well-defined. Recently, fauna from three presumed middle class sites have been examined. These include 66 Society Street, President Street (Zierden and Raynor 1988), and VRTC (Grimes and Zierden 1988). Unfortunately, the samples from these small projects fall short of the minimum sample size criterion for reliable interpretations of diet; however, they do provide some dietary insights and a means for evaluating sample bias (see Appendix I). The 66 Society sample was less diverse than those of the upper class sites with only one wild mammal, a few fish and no wild birds recovered. This could be a function of sample size or it could be reflective of middle class diet. The cuts of beef represented support the interpretation of middle income status, since the cuts are of moderate economic cost in the nineteenth century (Appendix I). Recovery of larger samples from more nineteenth century middle status sites is necessary to further delineate their subsistence pattern.

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APPENDIX I

ANALYSIS OF THE VERTEBRATE FAUNA FROM 66 SOCIETY STREET, CHARLESTON

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A number of historic period archaeological sites in Charleston have been excavated since the beginning of this decade. Advances in the methods and theories of both historical archaeology and zooarchaeology have emphasized behavioral interpretation and recognition of patterns from archaeological remains. Recognition of patterns in subsistence behavior during the historic period has become more practicable as the archaeological data base has grown.

Patterns in faunal remains may be attributed to archaeological, as well as behavioral or systemic, variables (Schiffer 1977). Archaeological variables such as preservation conditions, sampling strategy, screen size, and methods of excavation and analysis affect subsistence pattern recognition in that they influence the survival, recovery, and interpretation of subsistence-related aspects of the archaeological record. Systemic variables such as site location, site function, temporal association, ethnic affiliation, and socioeconomic status for the site's occupants, on the other hand, influence the availability, choice, aquisition, preparation, service, and disposal of foods. It is of primary importance that the archaeologists have sufficient control over archaeological variables so that the behavioral aspects of patterning may be discerned.

The zooarchaeology of historic sites on the Southern Atlantic Coastal Plain has focused on how site function, site location (environmental zone), site setting (rural or urban), ethnicity, and socioeconomic status of the site's occupants affect subsistence behavior (Calhoun et al. 1984; Carder 1987; Reitz 1985, 1986, 1987; Reitz and Cumbaa 1983; Reitz and Honerkamp 1983; Reitz and Scarry 1985; Ruff 1986a, 1986b; Stewart-Abernathy and Ruff 1986). Reitz has utilized the faunal data from a number of these historic period sites to formulate hypotheses concerning contrasts in urban and rural subsistence strategies and the role of socioeconomic status and ethnicity in the use of vertebrates. She suggests that there are a number of recognizable differences in vertebrate use at rural and urban sites and that these differences may transcend or overshadow the influence of socioeconomic status.

The urban strategy, in contrast with the rural one, appears to have emphasized domestic meat (especially beef and pork) from a wide range of species, including domestic birds such as chicken, rock dove, and muscovy duck. Wild mammals and birds were used to a lesser extent at urban sites, and a more restricted range of wild species was exploited. Many of the same taxa of fish and reptiles have been identified from both rural and urban contexts, but both classes were exploited to a greater extent by rural populations. Although urbanites consumed a greater variety of domestic species, urban diets were typically less diverse than rural ones, which depended on an array of wild resources.

These differences probably reflect the influence of the market system. Markets in the urban setting would be expected to specialize in domestic meats and a few readily available wild species. The inaccessibility of markets to rural households would increase reliance on wild resources and reduce the variety of domestic species available.

The market economy would also be expected to influence the distribution of skeletal elements recovered from an archaeological site. Meat purchases by the cut in an urban setting would not be represented by the same array of elements as meat slaughtered in situ, which might be expected to occur more frequently in a rural setting. Skull fragments, teeth, foot bones, and other elements which are commonly discarded during butchering are often not present in the archaeological record when meat is purchased by the cut. The presence of such elements from cuts would be expected to be less costly, however, and may reflect ethnic preferences or low socioeconomic status rather than in situ butchering.

Socioeconomic status may be reflected in the faunal record through species diversity and the presence/absence of rare or costly taxa and of valued (meatier or tastier) or expensive portions of the animal. Socioeconomic status, however, as Lyman (1987) points out, may connote either income level or prestige, which are not necessarily correlated. Nevertheless, high income and/or prestige households would be expected to consume a wider variety of species, including more meaty or costly portions.

In their study of foodways in eighteenth century Spanish St. Augustine, Reitz and Cumbaa (1983) found a correlation between high faunal diversity and affluence. A wider range of vertebrate food resources were utilized by higher status households, presumably because dietary variety was valued and because these households could afford to augment standard fare by hiring the services of a hunting and fishing specialist. High diversity, however, also characterized low status households in St. Augustine. For these sites, diversity was associated with the necessity to utilize a wide variety of local, readily obtainable resources. The key to distinguishing low status and high status households which exploited diverse dietary resources might be found in access to domestic species or access to valued portions of an animal.

Economic value of domestic meat portions has been evaluated on the basis of cost per cut (Schultz and Gust 1983a, 1983b; Gust 1983) and on the basis of cost-efficiency (edible meat yield per cost of cut)(Lyman 1979, 1987). Costs of beef cuts are provided by mid to late nineteenth century butchers' account books and by early twentieth century government statistics. Both sources must first be critically evaluated for their value as historic documents before being incorporated into butchering studies. Moreover, the applicability of such pricing documents to earlier faunal materials has yet to be addressed. It remains to be seen

how butchering practices and prices have changed over time in this country. Consequently, use of butchered meat rankings as an indicator of socioeconomic status must be approached with caution.

Ethnic affiliation may be inferred from the use of rare species, the avoidance of common species, or the types of skeletal elements recovered. Patterns of vertebrate use have been hypothesized for early British colonial sites (Reitz and Honerkamp 1983); various ethnic components of a Spanish colonial community (Reitz and Cumbaa 1983); and for a Jewish household (Stewart-Abernathy and Ruff 1986). Reitz (1985) has also recognized differences between aboriginal and Spanish subsistence strategies. In a multi-ethnic community such as urban Charleston, however, ethicity and status are tightly interwoven and faunal markers of either may be obscured by the general urban pattern. In fact, site setting, site function, time period, ethnicity, and status are all generally interrelated, and it is often difficult to attribute a recognized pattern to a single one of these variables. It is important to realize that apparent similarities between faunal assemblages may actually have been influenced by different sets of variables.

Recognition and evaluation of these possible biases and methological shortcomings enhances one's understanding and appreciation of the complex variables that influence historic foodways. Additional biases which affect methods of quantification and analysis will be discussed in the methods and materials section below.

Methods and Materials

Sixty-six Society is the street address of a suburban domestic site excavated in 1987 by The Charleston Museum. When the present property owner decided to build a swimming pool, the area to be impacted was investigated under terms of a protective covenant with Historic Charleston Foundation. The archaeological sample was obtained from a 5 by 5 foot unit (TP 1), a 5 by 2.5 foot unit (TP 2), and a 2.5 by 7 foot backhoe trench. All material was screened through 1/4 inch mesh. The deposits discussed here date from 1800 to 1870. Documentary evidence indicates that ownership of the house passed through the hands of a number of individuals of moderate to high income. Since no major functional or temporal differences were observed among the excavation proveniences, all faunal materials were aggregated into a single analytical unit. A list of proveniences examined in this study is provided in Appendix A.

The vertebrate remains from 66 Society were examined by the author using the comparative skeletal collection of the Zooarchaeology Laboratory, Department of Anthropology, University of Georgia. Standard archaeological methods were employed. Bones of all taxa were counted and weighed in order to determine relative abundance of the species identified. Notations of

symmetry and degree of epiphyseal fusion of each skeletal element were recorded. Bone modifications were described in order to assess butchering techniques. Complete bones were measured following criteria established by Driesch (1976). Such measurements can be used to determine the original size of the animals utilized at the site.

The Minimum Number of Individuals (MNI) of each identified species was determined based on symmetry, size, and degree of fusion of skeletal elements using the minimum distinction approach. The percentage of the total MNI was also calculated for each species. Although MNI is a standard measure of taxonomic abundance in zooarchaeological analysis, its reliability has often been questioned. The manner in which analytical units are aggregated and the degree of fragmentation of bone on a site have a direct bearing on the accuracy of MNI calculations (Grayson 1979). In addition, the MNI index tends to overemphasize the contribution of small species to the total subsistence pattern (Wing and Brown 1979). Consider, for example, that twenty catfish individuals would hardly be expected to contribute as much to the diet as would a single large cow. It should be emphasized, however, that calculations of MNI do not necessarily suggest that the entire animal was utilized at the site. On the contrary, it is expected that at historic sites such as 66 Society the redistribution of meat through the market system would influence the distribution of the skeletal elements of a single individual in the archaeological record.

In addition to bone count, bone weight, and MNI, estimates of biomass were calculated to provide information on the quantity of meat supplied by the identified species. Estimates are based upon the allometric principal that the proportions of body mass, skeletal mass, and skeletal dimensions change with increasing size (Reitz et al. 1987). The relationship between body weight and skeletal weight is described by the allometric equation:

$$Y=aX^{b}$$

where Y is a measure of biomass (quantity of meat or original live weight), X represents a body size measure (skeletal weight or linear dimension of a bone), b is an allometric constant, and a is the ratio of specific growth rates of Y and X. The logarithmic form of this equation:

$$\log Y=b(\log X) + \log a$$

develops a rectilinear plot for the variables on logarithmic coordinates where b represents the slope of such a plot and a represents the Y value at $X=1$. Based on the allometric nature of growth, meat weight (Y) can be predicted by the archaeological bone weight (X) or total live weight of the animal (Y) can be predicted using a linear skeletal measurement (X). Values for a and b are obtained from calculations based on data at the Florida State Museum, University of Florida, and the Zooarchaeology

Laboratory, University of Georgia. The allometric formulae used here are presented in Table 1.

Both MNI and biomass calculations are subject to sample size bias (Grayson 1979; Wing and Brown 1979). Based on statistical data from Caribbean faunal collections, it has been suggested that samples of less than 200 individuals or 1400 bones are too small for reliable dietary interpretations. With small samples the diversity of species and relative abundance of different species is probably somewhat inaccurate.

The age at death of the identified domestic mammal species (cow and pig) was estimated by observing the degree of epiphyseal fusion for selected elements, as well as bones size and texture. Proximal and distal ends of long bones fuse with the shaft in a regular temporal sequence (Gilbert 1980; Schmid 1972; Silver 1963), though the rates of fusion are affected by environmental factors and domestication (Watson 1978). Growth is considered complete when the ends (epiphyses) are fused with the shaft of the bone. Fusion rates can be grouped into four general categories. Bones identified were noted as fused or unfused in the age category where fusion of that element normally occurs. Age grouping is more successful for unfused bones which fuse in the first 12 to 18 months of the animal's life (indicating a juvenile less that 18 months of age) and for fused bones which complete growth at 3 to 4 years of age (indicating a fully adult individual at or over 3/4 years of age) than for intermediate degrees of fusion. For example, an element which fuses around 18 months of age and is found fused archaeologically could be from an individual which died just after fusion was complete or many years later. The ambiguity inherent in age groupings is reduced somewhat by recording each element under the maximum age category possible. In several cases, where degree of fusion was not observable due to breakage or butchering, size and texture of bones was used to estimate the general age of individuals. Texture is useful in recognizing juvenile individuals even without evidence of fusion since their bones are much smaller and more porous than those of adults.

Results

Bone count, bone weight, MNI, and biomass calculations for each taxon are provided in Table 2. Table 3 summarizes these data into the following categories: domestic mammals, wild mammals, domestic birds, wild birds, turtles, fishes, and commensal species. The unidentified mammal, large mammal, bird, and bone categories are not included in this summary.

In terms of both bone count (528) and MNI (19), the 66 Society faunal assemblage falls short of the minimum sample size criterion of 1400 bones or 200 individuals discussed above. Consequently, the 66 Society sample at its present size is not expected to provide a reliable interpretation of the diet of the site's occupants. Nevertheless, comparison of patterns

recognized in the 66 Society assemblage with those of temporally and functionally similar sites (particularly other sites in Charleston) provides a means of evaluating sample size bias. Moreover, in spite of limitations in using a small sample to interpret diet, the abundance of butchered bone from 66 Society provides an opportunity to concentrate on butchering patterns and possible indicators of the social status or income level of the site's occupants (Schultz and Gust 1983a, 1983b; Lyman 1987).

In terms of both individuals and biomass, cattle (Bos taurus) is the dominant taxon, represented by five individuals and 71% of the biomass (Table 3). Pigs (Sus scrofa) are represented by two individuals and 14% of the biomass. Together these two domestic animals comprise 36.8% of the individuals estimated and 85% of the biomass from the summary species list. No other domestic mammalian taxa were identified, though the unidentified large mammal category contains bones of sufficient size and cortical thickness that they could represent either cow or horse. Similarly, the unidentified artiodactyl category consists of seven fragments which may represent sheep, goat, or deer but could not be positively identified to species. The only other domestic mammal identified was the partial, in situ skeleton of a dog (Canine familiaris) buried in a trash pit (Feature 2). For the purposes of this paper, the dog remains are considered to be a commensal animal which lives in close proximity to humans without contributing to their diet, such as pets and vermin, and are not included in the domestic mammal category.

Birds and other wild mammals were rare in the collection. Domestic birds included three chickens (Gallus gallus) and a rock dove (Columba livia), which together contributed less than 1% of the biomass (Table 3a). Although it is possible that rock dove could be either wild or domestic, it has consistently been considered domestic when encountered in other historic Charleston faunal assemblages and will be counted as such in this case for comparability's sake. No wild birds were identified. The only wild mammal identified was the white-tailed deer (Odocoileus virginianus), which contributed three individuals and 4% of the biomass (Table 3).

Turtles and fishes were also rare in the collection. Fragments from two distinct species of pond turtle (Emydidae) contributed less than 1% of the biomass (Table 3). Although neither turtle could be identified to the species level, an MNI of two was estimated. Fishes were represented by a single cranial fragment from a gafftopsail catfish (Bagre marinus) and a fragment from either drum (Sciaenidae) or porgy (Sparidae) families. Five unidentifiable fragments of fish bone were also recovered. Combined, fish represented 0.2% of the biomass.

While the number of domestic individuals does not seem significantly higher than the number of wild individuals, domestic species clearly constitute the bulk of the biomass on the site summary list (Table 3). Domestic species also

predominate in terms of bone count and bone weight among those species which could be identified to the family or species levels. Overall the number of different species was quite low for both domestic and wild taxa. This is expectable given the size of the sample.

Analysis of age categories for domestic animals based on epiphyseal fusion, as described above, indicates a range of ages for both cattle and swine (Table 4). Of the five cow individuals identified, one was adult, one was sub-adult, and two may be either sub-adult or adult. The fifth individual was juvenile, based on the small size and porous texture of a metatarsal shaft fragment for which fusion could not be determined. Pigs are represented by one juvenile and one sub-adult animal. Age estimations could not be made for deer since degree of fusion could not be observed on any of the elements identified. One juvenile or sub-adult chicken was identified on the basis of immature bone texture and incomplete bone formation. The other two chickens appear to have been adults.

Very little evidence was found for the sex of the animals identified. A single chicken tarsometatarsus with a spur indicates the presence of a rooster. No medullary deposits were observed on the remaining bird bones, which indicates that none of the chickens or rock doves were in laying condition at the time of their death (Rick 1975).

Fourteen percent of the bones examined exhibited some sort of modification (Table 5), including 42 sawed elements and 28 cut elements. The majority of the sawed and cut bones were from cattle and from the unidentified mammal and large mammal categories. In the latter categories the element on which the modification was observed was rarely identifiable and thus contributes little to the interpretation of butchering patterns. Eighty-six percent of the cow bones, however, exhibited either saw or cut marks. In contrast, only 17% of the pig bones were modified. A single thin-sawed innominate "slice" from a deer suggests that professionally butchered venison might have been available in the market.

Cut marks were generally small, superficial nicks which probably represent efforts to strip meat off the bone. Cut marks were most frequently observed on long bone shaft fragments. The majority of the sawed bones appear to represent individual cuts of meat rather than attempts to disarticulate the carcass. The most commonly observed beef cuts were chuck, arm, or round roasts and steaks from the humerus shaft (n=7) and steaks from the femur shaft (n=4). Thick fore- and hindshank cuts through the radius, ulna, or tibia shafts were also observed. Additional bone modifications identified in the sample included one rodent-gnawed fragment and a dog-gnawed, sawed bone. No burnt bones were observed. This suggests that the food refuse was buried at a depth sufficient to avoid burning during the 1838 fire.

Element distributions (Table 6) were calculated for cattle, pig, deer, and the unidentified artiodactyl categories. Cow bones from each element group were identified, though the paucity of head elements is noteworthy. Beef forequarter elements were almost twice as common as those from the hindquarters. In contrast, pig hindquarter elements were much more common than forequarter elements. A large number of pig head elements, mostly teeth, were identified as well. No bones from the forefoot of the pig were identified. Deer seem to be represented by a fairly even distribution of elements, though the number of deer bones identified is too small to ascertain whether deer were being butchered on the site or were purchased from a market. Head and foot elements were notably absent from the unidentified artiodactyl category. When the data for cattle, pig, deer, and unidentified artiodactyl are combined, the number of forequarter and hindquarter elements is identical, but the number of forefoot fragments is much lower than hindfood fragments. Overall, head and foot elements appear to be underrepresented. As a basis for future work, measurements of complete bones are provided in Table 7.

Discussion

Interpretation of the results described above are complicated by several factors. Firstly, the salvage nature of the 66 Society project precluded large-scale excavation of the site, which limits the variety of contexts from which faunal remains were recovered. Hence, the assemblage may or may not accurately reflect the types or relative abundance of animals butchered, consumed, and/or discarded at the site. Second, as discussed above, it is questionable whether a sample of such small size is adequate for reliable dietary information. This discussion will emphasize butchering practices and recognition of socioeconomic status markers, though both analytical approaches are not without problems. These considerations should be kept in mind throughout the comments that follow.

Despite its small size, the 66 Society sample seems fairly typical of the nineteenth century urban subsistence pattern in the predominance of domestic species. Domestic mammals and birds contributed the majority of individuals and the biomass. Cattle and pigs provided 37% of the individuals and 85% of the biomass in the summary species list. Domestic birds (chickens and rock doves) contributed over 20% of the individuals but less than 1% of the biomass. Deer were the only wild mammals identified, providing 16% of the individuals and 4% of the biomass. No wild birds were identified. The dietary contribution of both turtles and fish in terms of biomass was small. The absence of caprines (sheep/goats) from the sample is somewhat atypical of historic period Charleston samples and reduces variety in the domestic component of the fauna. Overall numbers of different domestic and wild taxa were quite low, but once again this may simply be a product of small sample size.

When the MNI and biomass percentages from the summary faunal categories are compared with those of other Charleston sites (Table 8), the similarities are striking. Both Aiken-Rhett and Gibbes House are suburban, domestic sites of documented high status. The Aiken-Rhett materials date from the 1820s to the 1880s, while the collection from Gibbes House is dated 1770-1840. Both samples are almost twice as large in terms of bone count as the 66 Society faunal collection, but all are surprisingly similar when MNI and biomass percentages are compared. The most notable difference in the 66 Society figures are 1) the sizeable biomass contribution of the wild mammal category, which is represented wholly by deer, and 2) the absence of wild birds. The higher biomass percentage of commensal taxa from 66 Society is a reflection of the partial dog burial found in Feature 2.

Another difference among the three samples is not apparent from the data presented in Table 8. This is the larger number of fish bones and the higher number of different fish species identified from Gibbes House and especially from Aiken-Rhett. The scarcity of fish in the 66 Society faunal sample, however, cannot be strictly equated with its contribution to the diet of the household since fish purchased as filets would not be preserved archaeologically. Similarly, the consumption of salt-preserved fish, which are generally at least partially boned, might be obscured in the archaeological record (Reitz 1986).

Both the Aiken-Rhett and Gibbes House faunal collections contain a greater variety of taxa than the average urban sample. Ruff (1986a, 1986b) suggests this may be a reflection of the documented high status of the sites' occupants. The lower number of taxa in the 66 Society faunal collection, on the other hand, may indicate that the occupants of the site were not as affluent as those of Aiken-Rhett or Gibbes House, or it may simply be a product of smaller sample size.

The beef butchering data tend to support the former conclusion (Table 9 and Figure 1). In Table 9, data provided by Gust, Schultz, and Lyman are compared with data from 66 Society. Schultz and Gust (1983a) provided their California data in a rank order in terms of meat provided from a high of 1 to a low of 13. The sawed cow bones from 66 Society were then identified according to modern cuts of beef as defined by Schultz, Gust, and Lyman. During this operation it was found that beef cuts identified from 66 Society (chuck/arm, chuck/rib, foreshank, round, and hindshank) did not correspond with those identified either from California or Fort Walla Walla so that the Schultz, Gust, and Lyman data had to be lumped across ranks in some instances. The final column in Table 9 lists the alternative interpretations made possible by the comparison.

When the 66 Society data are compared to the retail value scale proposed by Schultz and Gust (1983a) we find that round is ranked "three," chuck is ranked "five,", arm is ranked "six," and foreshank and hindshank are ranked "nine." This suggests that

the majority of the beef cuts identified from 66 Society were of moderate economic value and several were of low economic value. None of the highest valued cuts (short loin, sirloin, and rib) were positively identified from the site, although one rib fragment which may represent a chuck or rib was recovered. It is unclear whether late nineteenth century California chuck, arm, or rib cuts are actually represented in the 66 Society collection.

Analysis of 66 Society beef cuts in terms of Lyman's (1987) meat yield rank provides comparable results in terms of status interpretation. Lyman's data suggests that the chuck and round are the most cost-efficient beef cut purchases because they fall near the middle of the cost per pound range of Schultz and Gust's ranking and have high meat yields. Arm, foreshank, and hindshank cuts yield considerably less meat for the price but are more cost-efficient than the rump, brisket, and neck, none of which were represented in the assemblage.

The predominance of cuts of moderate cost-efficiency, and the absence of the most expensive cuts and the lowest yield cuts would be expected of a middle or upper-middle class household. While there may be some question as to whether cost-efficiency of beef purchases is highly correlated with income level or economic class, the combination of methodological approaches taken here clearly suggests the occupants of 66 Society were at least not of low socioeconomic status.

One additional aspect of the butchered remains can be examined with regard to status. Of the eighteen sawed cow bones identified, eleven were thick portions (roasts or stew meat), five were thin slices (steaks), and two were portions for which thickness could not be determined. It is expected, but has not been tested, that individual portions, particularly if from a highly valued cut, would be more common in upper status households than in lower class residences. Similarly, portions for collective consumption, especially from cuts of lower economic value, might be more commonly consumed in lower class households. If this holds true, the combination of low-value, collective portions (foreshank and hindshank roasts) and moderate-value, individualized and collective portions (chuck, arm, round steaks, and roasts) recovered from 66 Society suggests a household of middle to upper-middle class status.

From Table 9 and Figure 1 it should be obvious that a number of sawed cow bones from 66 Society do not fit neatly into the categories defined by Gust, Schultz, and Lyman. In particular, it is difficult to ascertain whether the humerus shaft fragments constitute arm or chuck cuts. This points to temporal and regional variations in butchering techniques and prices, and brings into question the applicability of their work to eighteenth and early nineteenth century Atlantic collections since both groups of researchers use recent documents from the western United States. There is a need for increased awareness and research on localized butchering practices and prices.

Lastly, the distribution of identified elements from the various artiodactyls (Table 6) seems worthy of discussion. The relative scarcity of cranial fragments, teeth, and foot elements suggests aquisition of meat from a market, as opposed to in situ butchering. Particularly in the case of cattle, it seems quite unlikely that seven distal humerus shaft fragments but only one forefoot fragment (a distal metacarpal epiphysis) would be recovered unless already butchered portions were being obtained from a market and brought to the site. Acquisition of meat from a market is also suggested by the recovery of a thin, evenly sawed innominate "slice" from a deer. Procurement of meat from a market is expected given the time period, urban setting, and status of the site's inhabitants.

Conclusions

The increasing number of carefully recovered vertebrate samples from historic sites on the Southern Atlantic Coastal Plain has made it possible for zooarchaeologists to recognize patterns in subsistence remains. Behavioral or systemic factors which influence subsistence patterns include time period, site function, site location and setting, and socioeconomic status and ethnic affiliation of the site's occupants.

The faunal remains from 66 Society were recovered from an urban domestic context and date from 1800 to 1870. Documentary research suggests the occupants were of moderate income. The faunal assemblage was examined for indications of urban subsistence strategies, identification of characteristics suggesting occupant status, and interpretations of patterns in the butchered remains.

Although the sample size is quite small, the 66 Society faunal sample conforms to the previously described urban pattern in the predominance of domestic taxa (mostly cattle) over wild taxa and the overall low number of taxa. No evidence for the ethnic affiliation of the site's occupants was discerned, but the middle to upper-middle class status of the occupants was confirmed by patterns in the butchered remains. When compared with the fauna from Aiken-Rhett and Gibbes House, two functionally and temporally analogous urban, high status sites, the 66 Society materials were found to be quite similar. The principal difference observed was the lower numbers of different taxa represented in the 66 Society collection. This may be a reflection of the smaller size of the 66 Society sample or it may indicate subtle differences in the degree of affluence of the site's occupants. Recovery of larger samples from tightly controlled contexts and refined interpretation of butchering data should provide resolution of such questions and will allow further definition of patterns in subsistence behavior.

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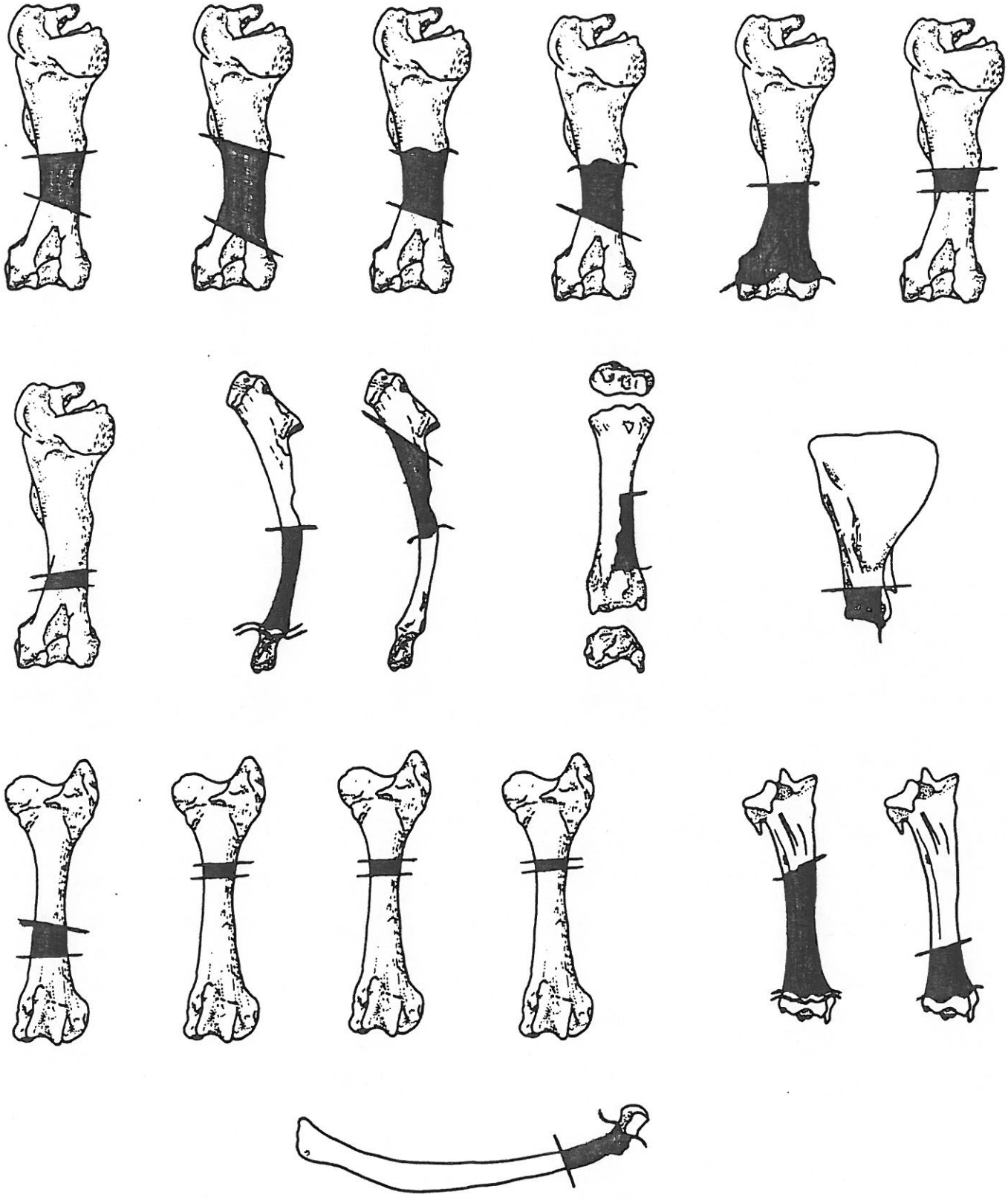

FIGURE 1: Sawed Cow Elements from 66 Society. The shaded area represents the portion of the bone recovered. Straight lines represent saw cuts; irregular lines represent broken edges; double irregular lines represent an unfused epiphyseal end. Sawed cow bones, illustrated from top to bottom, include 7 humeri, 2 ulnae, 1 radius, 1 scapula, 4 femora, 2 tibiae, and a rib

Table 1. Allometric Values Used in This Study.[a]

Faunal Category	N	log a	b	r^2
Biomass, kg, from Bone Weight, kg				
Mammal	97	1.12	0.90	0.94
Bird	307	1.04	0.91	0.97
Turtle	26	0.51	0.67	0.55
Osteichthyes	393	0.90	0.81	0.80
Siluriformes	36	1.15	0.95	0.87
Perciformes	274	0.93	0.83	0.76

[a]The allometric formula is $Y=aX^b$, where Y is biomass, X is bone weight, a and b are scaled constants, N is the number of observations used in the regression, and r^2 is the proportion of total variance explained by the regression model (Reitz et al. 1986).

Table 2. 66 Society Street: Species List.

	Bone Count	MNI #	MNI %	Bone Wt(gm)	Biomass gm	Biomass %
UID Mammal	184			253.48	3833.10	12.9
UID Large Mammal	39			366.76	5345.00	18.0
Canis familiaris	105	1	5.3	117.98	1925.90	6.5
Dog						
UID Artiodactyl	7			15.06	302.00	1.0
Sus scrofa	24	2	10.5	186.11	2902.60	9.8
Pig						
Odocoileus virginianus	8	3	15.8	49.29	878.00	3.0
Deer						
Bos taurus	29	5	26.3	1087.54	14216.8	47.8
Cow						
UID Bird	14			3.68	66.80	0.2
Gallus gallus	7	3	15.8	4.09	73.60	0.3
Chicken						
Columba livia	2	1	5.3	0.84	17.40	0.6
Rock dove						
UID Turtle	1			0.34	15.30	0.1
Emydidae	2	2	10.5	6.40	109.70	0.4
Pond turtle						

Table 2. 66 Society Street: Species List. (cont.)

	Bone Count	MNI #	MNI %	Bone Wt(gm)	Biomass gm	Biomass %
UID Fish	5			1.38	38.30	0.1
Bagre marinus	1	1	5.3	0.61	12.50	tr
Gafftopsail catfish						
Perciformes	1	1	5.3	0.64	19.00	0.1
UID Bone	99	--		27.71	--------	
TOTAL	528	19		2121.91	29756.00	

Table 3. 66 Society Street: Summary of Species List[a].

Summary Group	Bone Count	MNI #	MNI %	Biomass gm	Biomass %
Domestic Mammals	53	7	36.8	17119.4	84.9
Wild Mammals	8	3	15.8	878.0	4.4
Domestic Birds	9	4	21.1	91.0	0.5
Turtles	3	2	10.5	109.7	0.5
Fish	2	2	10.5	31.5	0.2
Commensal Taxa	105	1	5.3	1925.9	9.6
TOTAL	179	19		20155.5	

[a]Summary list does not include UID Mammal, UID Large Mammal, UID Bird, or UID Bone.

Table 4. 66 Society Street: Number of Elements Identified for Selected Age Categories on the Basis of Epiphyseal Fusion of Pig and Cow.

PIG

Age Group	# of Bones
Less than 2 years of age	2
At least 2 years of age	2
Less than 3.5 years of age	4
3.5 years of age or older	0
Total	8

COW

Age Group	# of Bones
Less than 1.5 years of age	0
At least 1.5 years of age	3
Less than 3 years of age	4
4 years of age or older	1
Total	8

Table 5. 66 Society Street: Bone Modifications Observed.

Taxon	Sawed	Cut	Rodent Gnawed	Dog Gnawed	Total
UID Mammal	9	10	1		20
UID Large Mammal	10	6			16
UID Artiodactyl	2	2			4
Pig	2	2			4
Deer	1	1			2
Cow	18	7	-	1	26
TOTAL	42	28	1	1	72

Table 6. 66 Society Street: Distribution of Identified Elements[a].

Element Group	Dog	Artiodactyl	Pig	Deer	Cow	Total
Head	1		10	2	1	14
Forequarters	9	1	2	2	13	27
Forefeet	9				1	10
Hindquarters	3	2	7	2	7	21
Hindfeet	12		3	1	4	20
Feet	3		2	1	2	76
Other	---	4	--	-	1	5
TOTAL	105	7	24	8	29	173

[a]Element groups are as follows: Head, cranium, mandible, maxilla, teeth; Forequarters, scapula, humerus, radius, ulna, anterior vertebrae; Forefeet, metacarpals, carpals; Hindquarters, sacrum, innominate, femur, patella, tibia, fibula, posterior vertebrae; Hindfeet, metatarsals, tarsals; Feet, phalanges and unidentified metapodials; Other, ribs, unidentified vertebrae, sternum.

Table 7. 66 Society Street: Measurements.

Taxon	Element	Dimension	Measurement, mm
Columba livia	Synsacrum	LV	42.0
Canis familiaris	Radius	Bp	20.6
		Bd	27.2
	Astragalus	GL	29.3, 29.3
	Calcaneus	GL	59.2, 59.2
		GB	19.0, 17.0
	Metacarpal III	GL	71.1
		Bp	10.4
	Metacarpal IV	GL	71.4
		Bp	9.8
	Metacarpal V	GL	62.0, 61.7
		Bp	11.0, 11.0
	Metatarsal IV	GL	63.2
		Bp	10.7
	Phalanx I	Bp	9.7,9.9,10.1,10.2, 10.0,9.7,9.6,9.7, 9.2,9.3,9.7,9.5, 10.0,10.4,10.2,9.6
		Bd	7.7,8.0,7.7,7.7, 7.6,7.9,8.0,7.5,7.4, 7.2,7.5,7.5,7.9,8.1, 8.2,8.1

Table 7. 66 Society Street: Measurements. (cont.)

Taxon	Element	Dimension	Measurement, mm
Canis familiaris	Phalanx I	GL	29.1,30.0,30.5, 30.7,31.0,39.6,29.7, 25.7,25.9,25.4,25.9, 30.5,26.0,25.0,24.2, 25.0
	Phalanx II	Bp	9.1,8.7,9.0,8.5, 8.6,8.4,8.4,8.9,8.9, 8.8,8.7,8.7,8.5
		Bd	8.9,8.6,9.2,7.6,7.7 7.8,7.9,9.0,8.4,8.7, 8.4,8.3,8.5
		GL	15.3,16.4,15.3, 15.0,15.3,15.9,15.5, 15.8,21.4,20.6,20.5, 21.7,21.7
Sus scrofa	1st phalanx	GLpe	34.0
		Bp	14.5
		SD	13.0
		Bd	14.0
	3rd phalanx	DLS	27.5
		Ld	25.0
		MBS	14.0

Table 7. 66 Society Street: Measurements. (cont.)

Taxon	Element	Dimension	Measurement, mm
Odocoileus virginianus	3rd phalanx	DLS	26.0
		Ld	23.5
		MBS	9.0
Bos taurus	Fibula	GB	30.0
	1st phalanx	GLpe	60.0, 58.5
		Bp	26.5, 25.5
		SD	22.5, 21.5
		Bd	26.0, 23.5

Table 8. Comparison of MNI and Biomass Percentages with Other Charleston Sites.

Summary Group	66 Society		Aiken-Rhett		Gibbes House	
	MNI	Biomass	MNI	Biomass	MNI	Biomass
Domestic Mammals	36.8	84.7	43.1	94.7	29.6	95.7
Wild Mammals	15.8	4.3	7.7	0.8	3.7	1.1
Domestic Birds	21.1	0.5	12.3	1.6	14.8	0.5
Wild Birds			6.2	0.9	18.5	0.9
Turtles	10.5	0.6	9.2	1.3	7.4	0.8
Fish	10.5	0.3	18.5	0.5	18.5	1.0
Commensal Taxa	5.3	9.5	3.1	0.2	7.4	0.1

Table 9. Beef Rankings.

Element	Cut	Schulz and Gust's Retail Value (Range 1-9)	Lyman's Meat Yield Rank (Range 1-13)	66 Society NISP	Cost-Efficiency Interpretation
Humerus Shaft	Chuck/Arm	5/6	1/6	7	Medium Cost-High Yield Medium Cost-Medium Yield
Distal Scapula	Chuck/Arm	5/6	1/6	1	Medium Cost-High Yield Medium Cost-Medium Yield
Rib Shaft	Chuck/Rib	5/2	1/3.5	1	Medium Cost-High Yield High Cost-High Yield
Ulna Shaft	Foreshank	9	9	2	Low Cost-Medium Yield
Radius Shaft	Foreshank	9	9	1	Low Cost-Medium Yield
Femur Shaft	Round	3	2	4	High Cost-High Yield
Tibia Shaft	Hindshank	9	8	2	Low Cost-Medium Yield

APPENDIX A. 66 SOCIETY STREET PROVINIENCES.

FS#	Unit	Zone	Level	Feature
3	TP1	1		
5	TP1	3	1	
6	TP1	3	2	
7	TP1	3	3	
8	TP1			2
9	TP1			Postmold 1
12	TP2	2	2	
13	Backhoe Trench			Top of Features 4,5
14	Backhoe Trench		4	
15	Backhoe Trench		5	
17	Backhoe Trench	3		
18	Backhoe Trench	1-2		