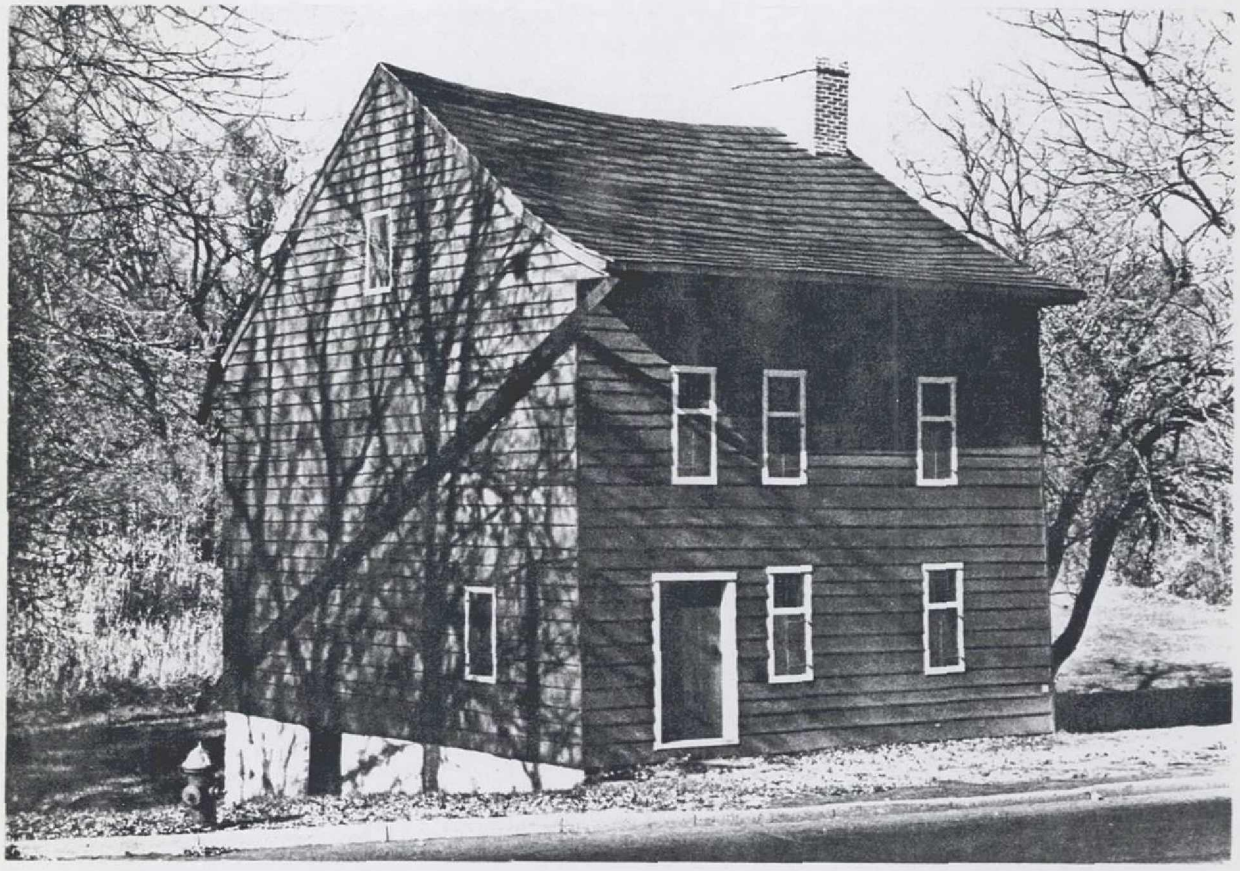
THE ARCHAEOLOGICAL INVESTIGATION OF THE VOORLEZER HOUSE SITE, STATEN ISLAND, NEW YORK



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November 1985

Report funded by The American Association for State & Local History

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Funding for this research was provided by the following organizations:

Fieldwork: Staten Island Historical Society

Laboratory Work: New York City Landmarks Preservation Commission, Archaeology Program

Faunal Analysis: Ladies Auxilary, Staten Island Historical Society

Report Preparation: The preparation of this report was made possible by a Grant-in-Aid for Research in State and Local History from the American Association for State and Local History, supported by the National Endowment for the Humanities, a federal agency.

Cover Design: Louise DeCesare
Cover Photograph: Carl Forster

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Acknowledgements

We are especially grateful to Gene Norman, Chairman of the New York City Landmarks Preservation Commission; Frank Sanchis, Executive Director of the Landmarks Preservation Commission; and Barnett Shepherd, Director of Richmondtown Restoration, who encouraged and always supported this project. We wish to thank Charles I. Sachs, Chief Curator at Richmondtown Restoration, for his comments and suggestions during all phases of this project. We appreciate all the help that was given to us by Stephen Barto, archivist for the Staten Island Historical Society. Thanks go to Ellen Day Hudson and Lucrezia Baragli for typing sections of this report. We wish to thank our ceramic and faunal consultants, Meta Janowitz and Kate T. Morgan, for their research and their comments. Finally, thanks go to Dr. Robert W. Venables, our historical consultant, for his excellent comments and suggestions.

The Voorlezer House site archaeological excavation has provided the Staten Island Historical Society with material evidence of the daily life at the site for two and a half centuries. The site has a fascinating ethnic history, including members of three of the most significant refugee groups in the American experience: the Huguenots in the colonial period, and the Irish and the Jews in the nineteenth century. Interestingly, the Huguenot, the Irish, the Jewish families who lived at the Voorlezer House site all seem primarily assimilative in the material culture which has survived archaeologically. Ethnic and religious diversity was undoubtedly demonstrated by the various inhabitants at the Voorlezer House site in ways (such as in religious ceremonies or language) that do not survive archaeologically because they are intangible or are composed of perishable physical materials.

This is the first French site and the first Jewish site excavated by archaeologists in any of the five boroughs of New York. The most detailed information that we uncovered pertained to the one hundred and sixty-seven year ownership of the site by the Rezeau family (French Huguenots) and their descendants. The Rosenberg family (Austrian Jews) occupied the site for forty-one years.

In addition to its focus on the history of these particular families, this archaeological report makes comparisons with other sites in order to place the Voorlezer House site in a larger context of Staten Island history and regional history. The archaeology of the Voorlezer House site demonstrates both the daily life of the residents and the evidence of wider trade patterns and fashions. The archaeology thus provides us with insights into what two hundred and fifty years of life in Richmondtown shared in common with the American mainstream.

Introduction

Archaeology and history are complementary disciplines. Each field has a different emphasis, yet the data uncovered by both can be combined in order to create a more complete picture of the past. Historical societies can use archaeology, as they have in the past, to locate buried foundations, but archaeology can provide much more information. Archaeologists can uncover architectural details, such as window panes and lead caming, that can aid the preservationist in reconstructing the original composition of the building. The location of outbuildings can provide information on land use. Buried objects can aid the architectural historian in dating the first use of a structure and in dating subsequent changes to a site. Artifacts may reflect the social status of a house's occupants. Faunal material may reveal information on the dietary patterns of the formers tenants. Artifacts unearthed in an excavation can be used by museum curators as a guide in chposing objects that can be displayed in the house museum as examples of typical goods used by family X. Archaeological and historical data can be used in tandem to interpret how an historic house (in this case, the Voorlezer House site) changed through time. The main focus, however, of this report is on the description and analysis of the data recovered from the archaeological site.

In 1981, the Staten Island Historical Society decided to incorporate archaeology into the restoration plans for one of its historic houses, the Voorlezer House (c. 1695). The Voorlezer House is listed on the National Register of Historic Places, is a New York City Landmark and is a National Landmark. For the past 40 years, the house has been interpreted to the public by museum educators as a Dutch schoolhouse. Almost no attention was given to the social history of the building's occupants or to its use after it ceased to function as a church building about 1700/01. The use of the building as a Dutch schoolhouse composed less than six years of its almost 300 year history.

Throughout most of its history, the Voorlezer House was owned by members of a family of French origin -- the Rezeaus. Rene Rezeau purchased the property in 1705 and his descendant, Harriet Wheatley sold the property in 1872 to a non-relative after it had been owned by the same family for 167 years. During its final years of private ownership, the house was used as a restaurant/saloon. The house has a varied history. A goal of the archaeological project has been to uncover material evidence of those former occupants and to gain an understanding about how these people lived.

A fascinating yet overlooked part of the site's history

is the legacy of the Rezeau family. Archaeological studies in the United States have focused on the life of the English settlers. Occasionally Spanish sites (in the south) and Dutch sites (in New York State) have been excavated.[1] French sites have generally been overlooked except for a few frontier fortifications, for example, Fort Louisburg (Johnston, 1983) and Fort Michilmackimac (Miller and Stone, 1970). The Voorlezer's House site presents an opportunity to see how this French family compared to its English neighbors.

In the last ten years, an increasing number of historical archaeologists have studied patterns of ethnicity in urban and rural settings. Some archaeologists have wondered whether ethnic differences seen in communities that existed in late 19th-century industrial America also existed in earlier periods of time. Archaeologists (Deetz 1977, Evans, Jr. 1980, and Ferguson 1980) have challanged the idea of the American melting pot and are looking for evidence of ethnic differences. Other archaeologists (Baker 1980, Baugher 1982, Du Cunzo 1982, and Schuyler 1980) wonder whether material remains may be misinterpreted as evidence of ethnicty when in fact they are a reflection of one's economic background. This report deals with an analysis of this question of ethnicity based first on historical and then on archaeological data.

In evaluating the Rezeau family, many questions can be asked. Did they assimilate or did they maintain an ethnic identity? How did this family change through time? Was there any noticeable change through the generations, in their material possessions, their status or dietary patterns? How did this family compare to other Staten Island families and how did they fit into the Colonial society as a whole? The archaeological and historical records were analyzed in order to answer these questions.

The Voorlezer House excavation took place in the earthen basement of the building during 1980. In May, 1939, the

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[1] There are various Spanish sites in St. Augustine, Florida (Kathleen Deagan, 1978; John Bostwick, 1980). Two Manhattan sites from the period of Dutch occupation in the 17th century are Stadt Huys and 100 Broad Street, but both site reports are under preparation.

house had been moved 15 feet from its original location. Part of the present basement is over the original backyard area and part is over the original basement. The excavation conducted by Dr. Sherene Baugher and a small staff was funded by the Staten Island Historical Society. Twenty-six 3' x 3' squares were excavated (234 square feet). Seven thousand, five hundred and twenty-seven artifacts were catalogued and 260.25 pounds of non-diagnostic objects (such as mortar and brick) were recorded and weighed (see Figure I). The amount of material preserved in the basement of the Voorlezer House is actually quite large when compared to the findings from two large Manhattan excavations. By comparison, the 1984 excavation of a block in lower Manhattan, the Broad Street site, uncovered only 40,000 artifacts. A 1984 excavation of a block on Wall Street, Manhattan (one acre in size), uncovered less than 15,000 artifacts. The Voorlezer House site is archaeologically rich in terms of the number and variety of artifacts unearthed.

In preparing this report, the archaeological data was evaluated meticulously and re-evaluated very thoroughly, but no evidence could be found for the use of the site prior to 1740. A comparison is made between this archaeological collection and the artifacts that have been discovered by archaeologists who have been excavating colonial sites in Lower Manhattan. Diagnostic 17th-century artifacts, such as Rhenish stoneware, Nottinghamware (English stoneware), English and Dutch clay smoking pipes, wine and rum bottles, and wine glasses, were found on the sites in Lower Manhattan[2] but not at the Voorlezer House site. Seventeenth-century artifacts were found on Staten Island by amateur archaeolgist Al Anderson (1965) when he excavated the site of Old Dorp. In addition, seventeenth-century ceramics and glass were unearthed in excavations at the Conference House in 1980 and during random digging in the 1950s around the Perine House -- both of these collections are currently being analyzed by Baugher and Baragli.[3]

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[2] Information on the artifact collections from the Stadt Huys and 7 Hanover Square excavations was obtained from Meta Janowitz, lab director for both sites; site reports on these excavations are in preparation. Data about the 100 Broad Street archaeological collection was obtained from Melba Myers, lab director.

[3] The Conference House Collection is owned by The Conference House Association; the Perine House Collection is owned by The Staten Island Historical Society.

Figure I

Total Number of Catalogued Items from the Voorlezer House Archaeological Collection

	Backyard	Basement	Total
Architectural	438	1,457	1,895
Household	1,463	2,797	4,260
Faunal	675	398	1,073
Personal	92	109	201
Miscellaneous	50	48	98
Total	2,718	4,809	7,527

Items Catalogued by Weight Only:

Architectural	8.33 lbs.	177.38 lbs.	185.71 lbs.
Household	-0-	74.54 lbs.	74.54 lbs.
Total	8.33 lbs.	251.92 lbs.	260.25 lbs.

Because there is evidence of seventeenth-century material being unearthed at excavations on both Staten Island and Manhattan but not at the Voorlezer House, one must consider the possibility that the soil conditions at the Voorlezer House might account for the lack of seventeenth-century material. However, the artifacts unearthed at the Voorlezer House site are in a very good state of preservation. Therefore, it is unlikely that the material from the period 1680-1740 would have decomposed, and that dating from 1740 to 1940 would have survived. Perhaps buried in some obscure record is a reference to the house having been moved in the Colonial period. Or a flood may have washed away material from this early period. The artifacts unearthed in the basement of the Voorlezer House do not contain any evidence for a pre-1740 occupation of the building.

This site has a clear, chronological sequence of use from 1740-1940. Archaeological field testing should be done if any new construction work or landscaping is undertaken around the Voorlezer House. Buried wells, cisterns, and privies are time capsules that contain artifacts discarded many years ago. Further testing would either confirm the current findings or provide new data revealing an earlier use of the house.

The material unearthed from the Voorlezer House site revealed a continuous use of the site from 1740 to 1940. The analysis of the archaeological and historical material focused on this time period. The early recorded history of the site and its use is discussed briefly in the historical chapter (#4), but no archaeological material from the late 17th century was uncovered which would indicate any pre-1740 use of this building by the Dutch Congregation or any other occupant. This does not diminish, however, the site's importance to the interpretation of early Staten Island history.

This report represents an interdisciplinary approach to the study of a site. We have combined both archaeological and historical data in order to interpret the use of the site through time.[4] The specific aims of the report are five-fold: first -- to explain the methods of excavation and the problems encountered during the fieldwork; second -- to delineate the laboratory methodology and to explain how both the archaeological collection and the site were dated; third -- to construct a chronological record of the site's owners and occupants;

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[4] This report follows a format found in many historical archaeology site reports and it is written so that it can be used by professional archaeologists for comparative research studies. However, we also wanted to write the report with a minimum amount of archaeological jargon so that it could also be used by the Curatorial and Educational Departments of the Richmondtown Restoration.

fourth -- write a history of the site from the 17th century through the 20th century; and fifth -- to analyze the archaeological data in order to interpret the lifestyles of a sequence of owners over a two hundred year period.

In Chapter One, a geographic description of the site (including maps) is given. Information on the funding, a detailing of the events relating to the restoration work on the site and the incorporation of the archaeology into the building plans is provided. The preparation and organization of fieldwork is described. The excavation procedures and problems (the presence of water on the site and the difficulties in excavating in and, at times, under water) are discussed. In spite of the difficulties, soil profiles were recorded and a soil stratigraphy was revealed. There were different periods of artifact deposition (in terms of soil composition and color and in the dates of the artifacts). In other words, the archaeological record revealed layers of refuse (garbage) which was discarded at different and identifiable periods in time.

Chapter Two explains the laboratory methodology and how the artifacts were dated. This chapter was written with the purpose of providing methodology information for Richmondtown's Education Department. In interpreting archaeology to the public, questions are always raised regarding how archaeologists do their work, both in the field and in the laboratory. The first two chapters delineate the steps involved in doing archaeological work. Since the general public is better informed about fieldwork, the report places its major emphasis on describing all the procedures in laboratory work.

Chapter Three explains how the site was dated. The methodology that was used to assign date ranges for each level is described. Charts are provided to enable the reader to review and assess the archaeological data clearly and easily. In the charts, the excavation levels (with the changes in soil composition and color) are directly related to specific time periods. The excavation of the site revealed a clear, chronological sequence for the various soil layers and excavation levels.

Chapter Four presents an historical overview of the site. Documentary information regarding the owners, occupants and land uses of the site is combined with the archaeological data in order to tie the individual excavation levels to particular residents. Information from deeds, wills, mortgages, census records, tax records, and maps is discussed. Charts that show the archaeological levels, the time periods, and the families who disposed of these artifacts are provided. A very brief discussion of the period 1680-1740 is presented. A detailed historical discussion of the site focuses on the time period relevant to the archaeological evidence of the

site's use (1740-1940).

On the basis of historical research, a general statement is made about the Voorlezer House site and its relationship to the village of Richmondtown. The Richmondtown area has undergone the following transformations: 17th century crossroads settlement within a community of scattered farms; 18th century -- expanding village and government center; 19th century -- unincorporated town; 20th century -- proto suburb and outdoor museum village complex. The land use of the Voorlezer House site reflects these changes. The property was used for farming, private residences and small businesses. A history of the site and how it changed through time is presented.

The fascinating period (both archaeologically and historically) of this site lies in the use of the property by a family of French ancestry -- the Rezeaus. In Chapter Four, documentary data about the family, its role in the community, and its geneology is provided.

The aim of Chapter Five is to analyze the archaeological data in tandem with the documentary material in order to interpret the site. The four major issues toward which our research was directed are discussed. The first is an investigation of the change in the 19th-century use of this site from that of a private residence to a restaurant/saloon. The second is an analysis of the socio-economic status and dietary patterns of the 18th and 19th century residential occupants of the house. Third, to evaluate if there were any differences in the material culture of the French Rezeau family from its English counterparts, thus providing archaeological evidence of ethnicity. The final issue is what the archaeological material came to reveal about 18th and 19th century trade networks.

Chapter One: The Excavation, Procedures and Problems

The purpose of this chapter is to detail the problems and procedures of the Voorlezer House site excavation. In order to accomplish this goal, this chapter will be organized in the following way: a brief physical description of the site will be given followed by a detailing of the events relating to the restoration work on the site and how archaeology was incorporated into the building plans. After presenting this background information, the aims, methods, procedures, and problems of the excavation are discussed.

Site Description

The Voorlezer House is located within the confines of the Richmondtown Restoration outdoor museum complex in the village of Richmondtown, which is in the center of Staten Island, New York (see Figure 1:1). Staten Island, in land area the third largest borough of New York City, is 13.9 miles long, 7.3 miles wide (extreme breadth), has 57 miles of waterfront, contains 60.9 square miles (Staten Island Chamber of Commerce, 1972:1), and encompasses a number of distinct ecological zones (see Figure 1:2). It has serpentine highlands, salt marshes, peat bogs, sand and dune beaches, pine barrens, and coastal plains (Shapiro, 1972). The island is the home of over 400 species of mammals, birds, reptiles, amphibians, and fish (Leng and Davis, 1933, vol. I: 27-62).

The Voorlezer House site is located on a coastal plain at the southern edge of the serpentine highlands, and is primarily covered with grass. The southwestern portion of the property has a low-lying marsh area. The House itself occupies a plot of land bordered by Arthur Kill Road to the east and the property of the Restoration to the north, west, and south (see Figure 1:3). The New York City Zoning map for Staten Island lists this parcel as block number 4442, lot 24.

The Voorlezer House is a two story frame structure with an attic, and a fieldstone basement. It is a New York City Landmark, a National Landmark, and is listed on the National Register of Historic Places. The house, believed to have been built in the 1690s, underwent many changes in its almost 300 year history. Today it looks like a modified saltbox with the roof line lower in the rear than in the front (see Figure 1:4). The house is painted red with white trim. Unlike most archaeological sites which are connected to historic house museums, this site is inside, not outside, the historic house. The earthen basement of the house was the area that was excavated.

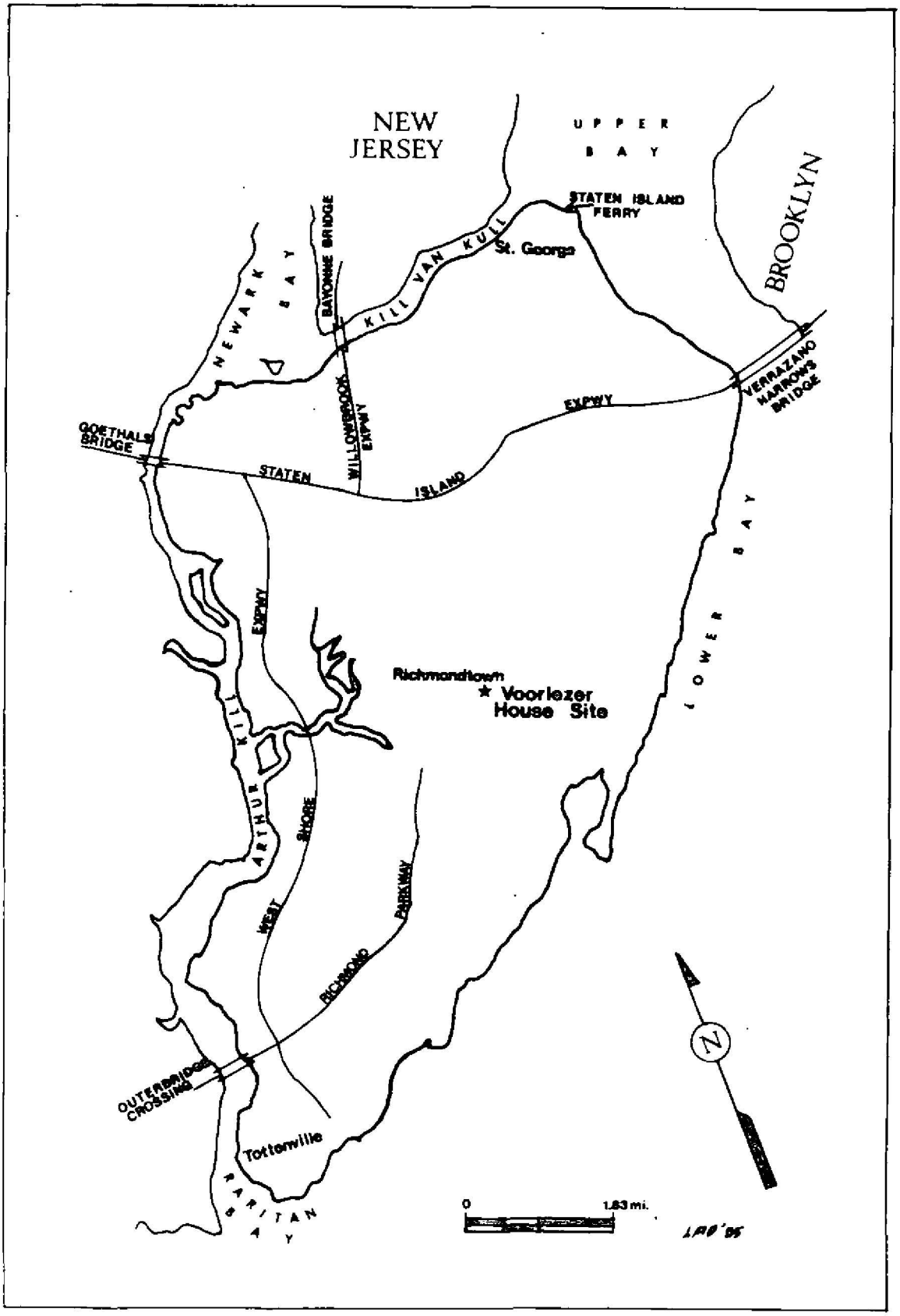

Fig. 1:1 A map of Staten Island showing the location of the Voorlezer House Site. Map adapted from Staten Island: A Resource Manual for School and Community, 1964, by S. Baugher and L. De Cesare.

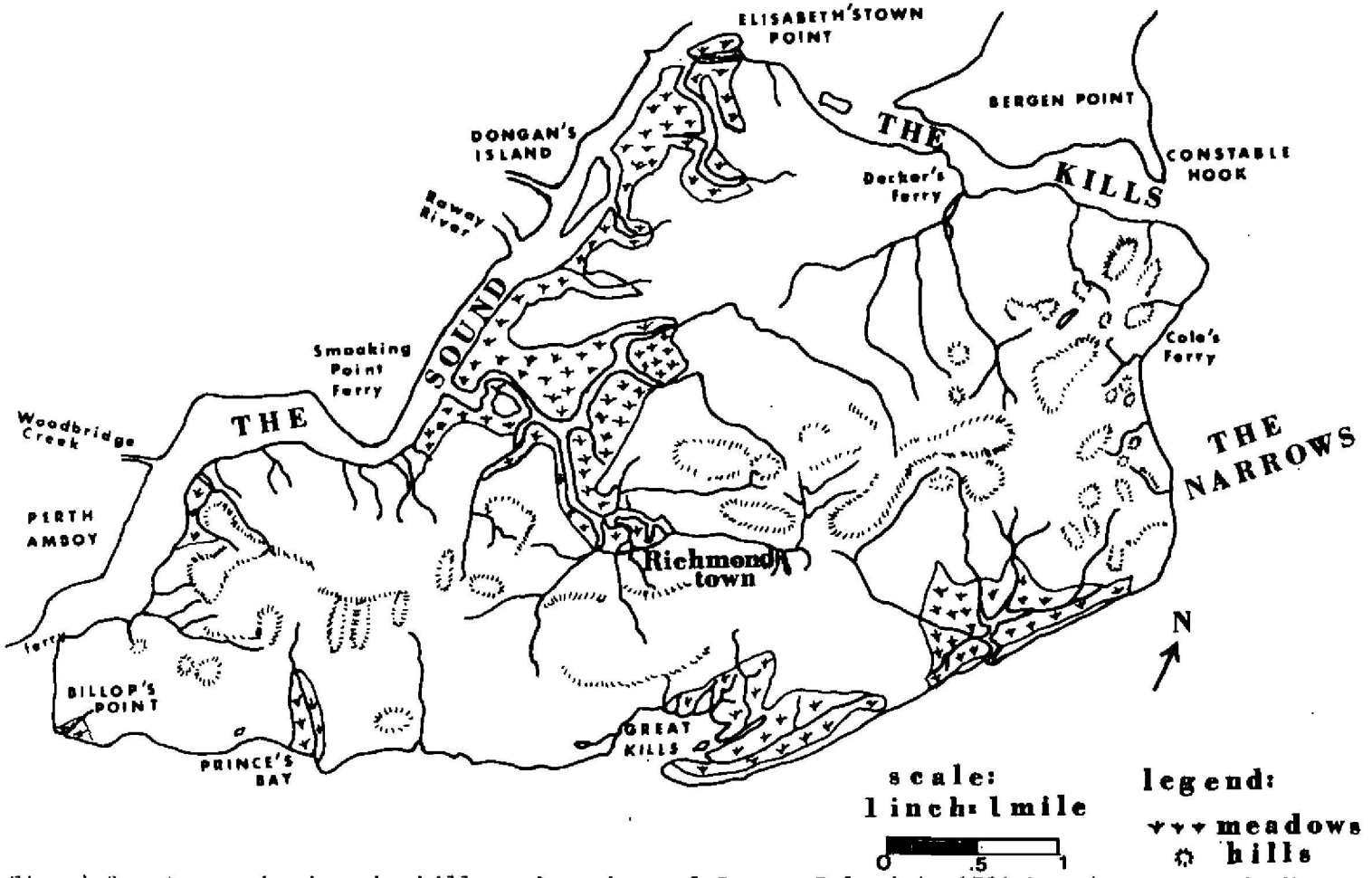

Fig. 1:2 A map showing the hills and meadows of Staten Island in 1781 based on a map in Henry Steinmeyer's book, Staten Island, 1524-1898. Map adapted by Sherene Baugher.

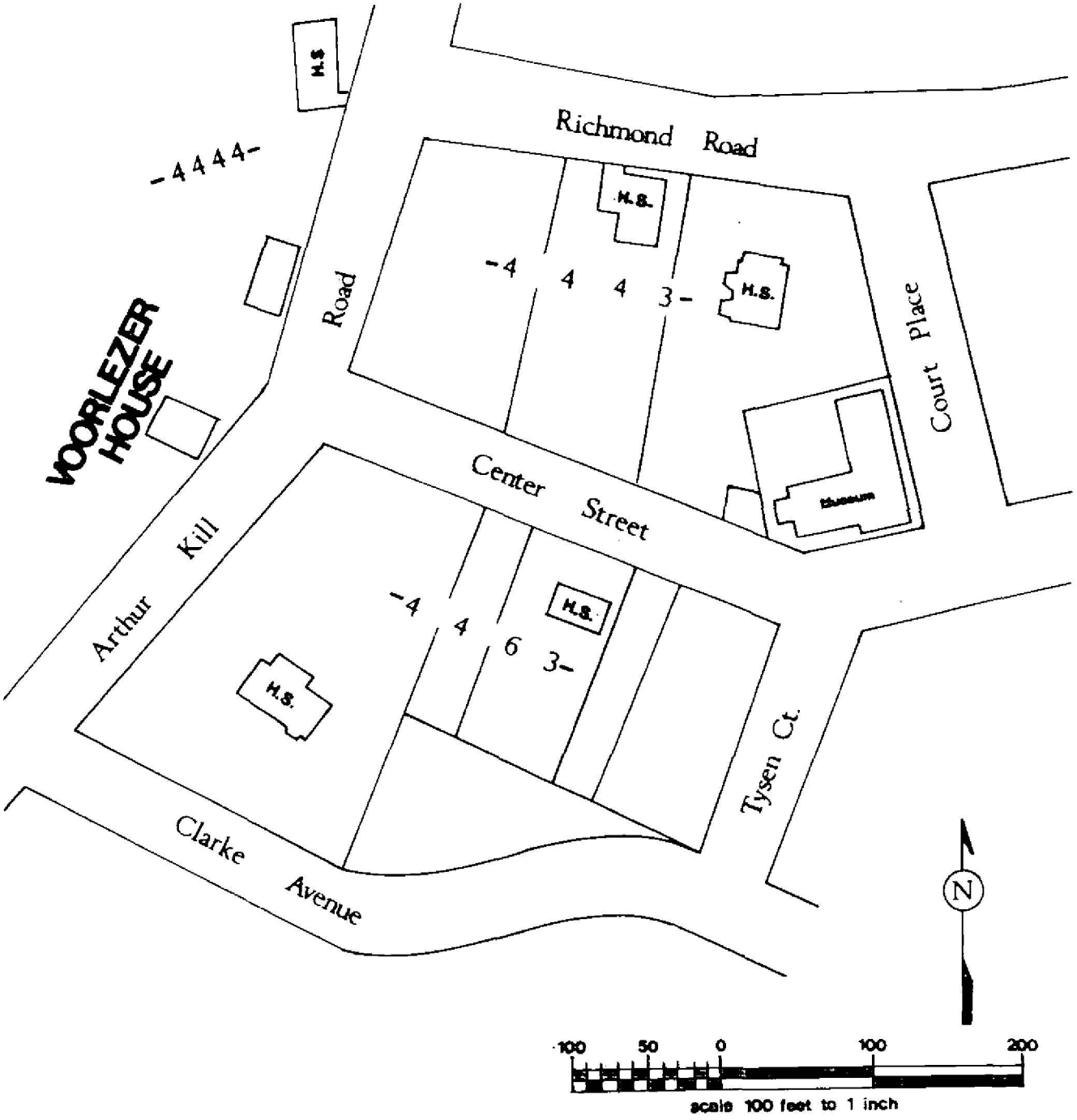

Fig. 1:3 The location of the Voorlezer House in Richmondtown. "H.S." indicates the extant historic structures owned by The Staten Island Historical Society on the grounds of the Richmondtown Restoration Center. This map is based on information in Bromley's 1938 Atlas of Staten Island, updated in 1983. Map was adapted by Louise De Cesare.

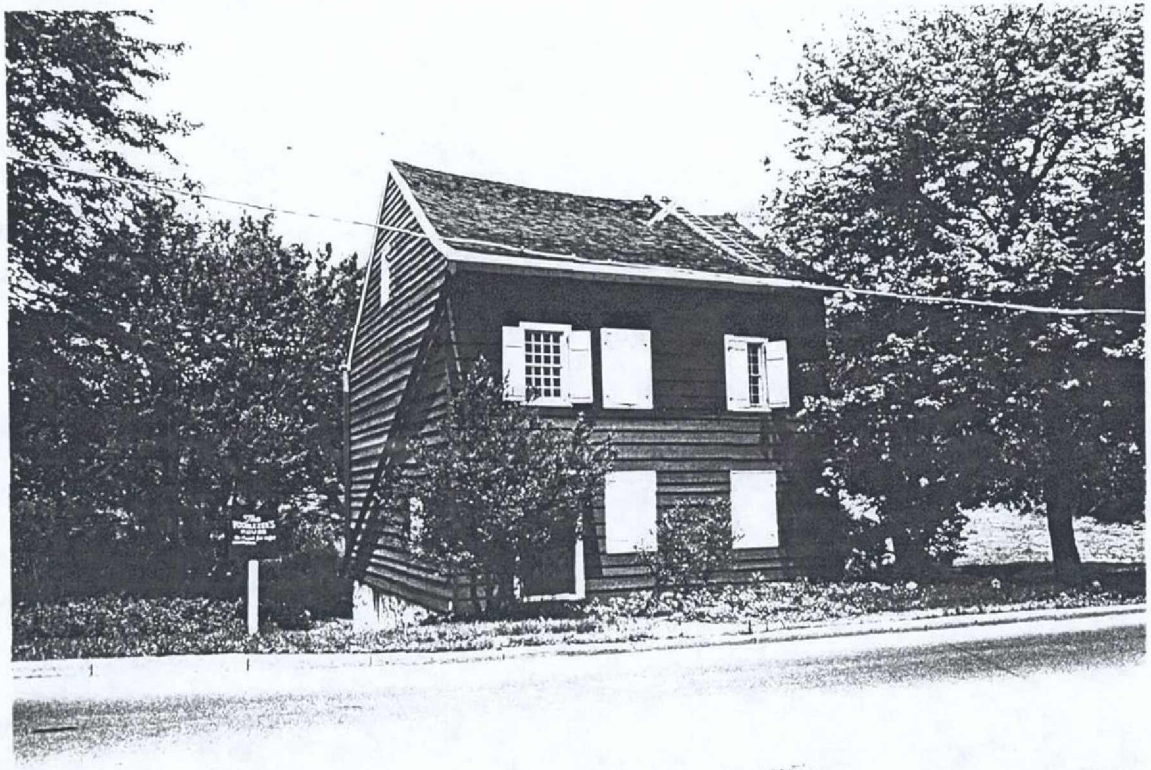

Figure 1:4 : The Voorlezer's House. Photo: C. Forster, 1981.

Restoration Work

The Voorlezer House, which is located approximately 25 feet south of the intersection of Center Street and Arthur Kill Road, was originally 15 feet east of its present location.

In the early 1700s, this small plot of land was mentioned in deeds of neighboring property as the site of the "Voorlezer House" (Delevan 1916: 137). In 1937, Loring McMillen and Leffert M.A. Haughwout prepared papers on the history of the Voorlezer House and presented their evidence to the Staten Island Historical Society. The McMillen (1937) and Haughwout (1937) papers outlined why they believed the house at #63 Arthur Kill Road to be the original Voorlezer House. This work was done at a time when the structure was in danger of being demolished because of the proposed widening of Arthur Kill Road, on which the house fronted. McMillen and Haughwout made a passionate case to the Historical Society to save this colonial building. After various negotiations, Marie Alice Kennedy, a member of the Staten Island Historical Society, bought this property from the Richmond County Federal Savings and Loan on January 17, 1939 (Liber 812 of Deeds, p. 587) and, two days later, sold the property for one dollar to the Staten Island Historical Society (Liber 812 of Deeds, p. 592). The House and the land remained in the hands of the Historical Society until 1958, when they were transferred to the City of New York as part of the contract between the Staten Island Historical Society and the City: this contract officially established Richmondtown Restoration.

From 1936 to 1939, the bank held title to the House site, but the bank allowed the Staten Island Historical Society to undertake some preliminary work.[1] A photograph of the building before restoration (see Figure 1:5) shows a much larger structure. The 1883 tavern-wing, which was attached to the north side of the structure, was demolished prior to the building's being moved. In 1939 the building was moved back (east) fifteen feet (half its depth) from its original location. The Society moved only that portion of the building that it believed was the original structure. From 1939-1942 the house was stripped of many of its later additions and was reconstructed to look like a colonial building. The building was opened to the public in 1942 and was decorated and interpreted as a schoolhouse.[2]

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[1] For more information, see the S.I.H.S. Historic Structure Fact Sheet which is on file in the archives of the Staten Island Historical Society.

[2] The AASLH grant narrative (1983: 2), prepared by Charles Sachs, Chief Curator of the Staten Island Historical Society, provides this additional information on the initial

Fig. 1:5 The Voorlezer House prior to restoration work. Photo: L. McMillan, 1932. Staten Island Historical Society.

In 1980 the house was closed to the public and a second phase of reconstruction work was planned. This time the work was to insure the structural stability of the building (the building lists about one foot to the south), and to restore (not reconstruct) the house to its late 17th-century appearance. Since the building is a Landmark, any exterior work on the structure requires a Certificate of Appropriateness from the New York City Landmarks Preservation Commission. William McMillen, Head of the Restoration's Department of Buildings and Grounds, has been meticulously researching the architectural details of late 17th and early 18th century extant houses in the northeast and comparing the data to what is known from the skeletal structure of the Voorlezer House. In 1983, the major portion of the planned changes for the exterior of the Voorlezer House were presented to the New York City Landmarks Preservation Commission and were approved by the Commission. Exterior work was completed in 1985.

Archaeology's Role in the Restoration Work

In 1980, the Voorlezer House had many structural problems. Flooding (after heavy rains) and water seepage into the dirt basement, even on dry days, has been a constant problem. This drainage problem, if unchecked, could adversely affect the foundation and ultimately the structural stability of the entire building. As part of the work planned for the basement, a drainage channel, a cement floor and a sump pump were to be installed in the dirt basement. The channel would direct the constantly flowing water to the sump area and a pump would remove the water from the basement.

In order to install the new drainage system, the earthen floor of the basement had to be lowered at least three feet. An initial shovel test by Restoration staff of the basement floor area to be removed revealed that archaeological material was buried in the floor of the basement. In March 1981, a series of meetings were held between Ted Kinnari, then assistant director of Richmondtown, and Dr. Sherene Baugher, city archaeologist from the New York City Landmarks Preservation Commission, to discuss the proposed work in the basement and whether any archaeological work should be incorporated into the restoration plans. Since the building's interior was not a City Landmark, Richmondtown did not need to obtain any certificates (from the Landmarks Commission) prior to doing any of the interior work. After much

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public/education interpretation of this structure: "The house was first opened to the public--with the second floor meeting room furnished as a mid-19th-century schoolroom--on April 14, 1942, as part of the celebration of the Centennial of the New York City Board of Education. Interior furnishings and house interpretation were further developed by 1947, when the first floor was installed as a late 17th century Voorlezer's schoolroom and an early 18th-century private chamber."

discussion it was felt that archaeological data should be used in tandem with the architectural and historical data to evaluate and interpret this historic house.

At Mr. Kinnari's request, Dr. Baugher prepared a proposed scope of work for the excavation which included a statement of goals and an estimated budget. Dr. Baugher stated that the archaeological material buried in the basement might: (1) aid in dating the house; (2) uncover some architectural clues about the composition of the original structure; (3) unearth objects that were used by the house's occupants over the last 280+ years; and (4) reveal information about the dietary patterns of the house's tenants. This information could be used: in the interpretative programs for the house, in the choice of interior furnishings, and as supportive data for the planned architectural changes. The excavation prososal was presented to the director of Richmondtown and then to the board of the Historical Society. The Historical Society approved of the archaeological work and agreed to contribute $3,000 to cover the basic costs of the excavation (supplies and some salaries).

Excavation Staff

After much discussion it was agreed that the Richmondtown staff would try to undertake as much of the work as was possible and practical. Charles Sachs, Chief Curator of the Historical Society, who had archaeological fieldwork experience, would oversee some of the work. The Landmarks Preservation Commission had agreed, as part of a cooperative project with Richmondtown, to have Dr. Baugher design the fieldwork and to visit the site periodically during the excavation. Brian Dorph, then a member of Richmondtown's Education Department, who had worked with Dr. Baugher on the six-week archaeological field school excavation of the Conference House site (Tottenville, Staten Island) in the summer of 1980, was chosen to train and supervise several other staff members of the Restoration's Education Department who also had agreed to participate in the dig.

Between mid-April and mid-June of 1981, Brian Dorph and assistants worked during the afternoon on the Voorlezer House excavation. In April, it had been presumed that the digging would be relatively straightforward and simple. This, however, did not prove to be the case. Because of the extremely high water table and constant seepage of ground water in the basement, the site was very difficult to excavate. As a result, plan as originally conceived had to be altered and a professional archaeologist had to take over the direction and supervision of all the fieldwork. Dr. Baugher agreed to take over those tasks and the bulk of the fieldwork was done on weekends between mid-June and the end of August 1981. Richmondtown agreed to hire two experienced

field archaeologists (Sarah Keyishian and Randall Goya), both of whom had undergraduate degrees in archaeology and had worked on major excavations in both the U.S. and abroad. These two people replaced the tour guides who were being paid to excavate the site. Brian Dorph continued to work on the site. Every weekend two to four unpaid volunteers helped by screening and washing the excavated artifacts. The volunteer work was supervised at all times by either Sarah or Brian. The field work was completed at the end of August, 1981, and Richmondtown was able to prepare the basement for the planned contruction work.

Excavation Procedures

Due to the relocation of the Voorlezer House, its present basement now contains part of the original basement as well as 15 feet of what had originally been the backyard. As the two areas of the present basement floor were historically distinct, excavation was divided into two sections: (1) a portion of the original basement, and (2) the original backyard. It was assumed that the material found in these two areas would be different. In the 17th and 18th centuries, colonists from all social strata tended to throw their garbage in their back and side yards. By the 19th century, people were using garbage pits (Baugher-Perlin et al, 1982; Deetz, 1977; and Noel Hume, 1969). In all three centuries, abandoned privies, wells and cisterns were used as garbage pits.[3] Archaeologists expect to find different patterns of gargabe disposal in a backyard area over the last three centuries. The material found in the original basement area should reveal how that space was used through time. For example: was it used as a kitchen, a storage room, or a workshop?

It was easy to divide the basement into two units since this division had already been done by the Buildings and Ground staff of Richmondtown. In 1980, the building was listing and some basic steps had to be taken to insure structural stability. Support beams and wooden cribbing were placed in the basement. Under the cribbing had also been poured a cement footing (for a support wall which was subsequently erected), which connected the northern and southern foundation walls of the structure. This cribbing visually divided the basement.

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[3]This information was verified by the excavation of 17th, 18th, and 19th century sites in lower Manhattan. These six archaeological excavations were monitored by Dr. Baugher; the site reports will be available in 1985.

Before the excavation began, Donald Defillo, from the Buildings and Grounds staff, using a transit, laid out a grid arrangement of twenty 3' by 3' squares in the area of the original basement (see Figure 1:6). The corners of the squares were marked with wooden stakes and string formed the boundary of the squares. Three additional squares were added by Baugher in the area of the original backyard. Because of the placement of the cribbing and the location of a stairway, there was only room for three squares (see Figure 1:6). The cribbing covered an area almost eight feet wide and about ten feet long. The twenty-three squares covered most of the available space (some with room to walk) in the basement. The squares in the E0 line ran directly along the eastern wall of the foundation, and the S3 line ran along the southern wall. All of the squares were troweled and all of the dirt was put through a 1/4 inch mesh screen. The artifacts were wet-screened with a hose and then bagged. All bags were labelled with the artifacts' provenience (square number and level number).

The ideal way to excavate the squares was by following the natural stratigraphy of the soil. However, the work was done in a dark basement with only two windows on the western wall (which provided very little to no natural light to the area east of the cribbing) and three portable lights (with 100 watt bulbs) that could be connected to beams or posts. These lights were connected by a long extension cord to the only electrical outlet in the house--the outlet on the first floor. The lack of much natural light in the eastern portion of the basement made it difficult to observe the changes in soil color from one stratum to another. This problem was compounded once water was encountered (about a foot and a half below the surface of the basement floor). Then all the soil had the look of brown mud.

Original Basement Area

In the excavation of the twenty squares in the eastern portion of the basement, the first three levels followed natural soil layers. Level 1 was a thin layer of grey-brown soil, Level 2 was a layer of plaster and bricks, and Level 3 had reddish-brown soil and more bricks. Water problems appeared below the brick layer. The soil, because it was water saturated, had a uniform appearance. It was hoped that if the water problem could be alleviated, the excavation could continue using the natural levels. A sump pit was dug near the basement door of the southern wall, and a pump was used to remove the water from the basement and into the marshy area off the southwestern portion of the rear yard. This, unfortunately, helped only slightly. Because of the poor lighting and the water problems, it was decided to remove the soil in arbitrary levels of four inches in thickness. The use of arbitrary levels would provide uniform horizontal control so that the artifacts could be analyzed from the

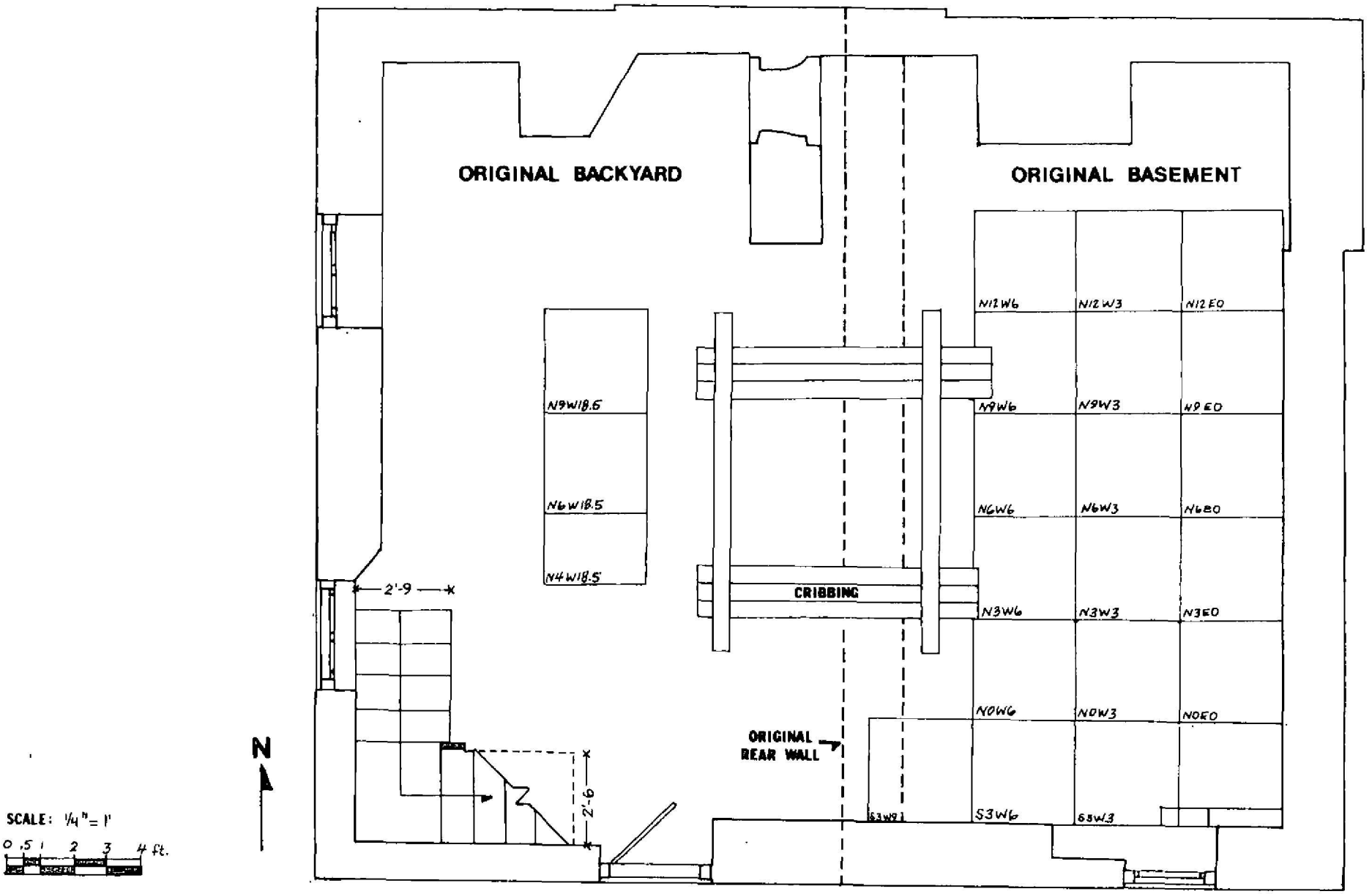


Fig. 1:6 Floor plan of the Voorlezer House Site showing the location of the excavation units. Plan adapted from Detwiller, 1972, by Louise De Cesare.

same depth in the soil but from different squares.

In excavating the first three levels, it appeared, at first, that the brick layer represented a brick floor. However, when all twenty squares were excavated it was clear that there was no uniform placement of the bricks. The bricks appeared to be from a demolished chimney or fireplace. A coal bin was located in Levels 2 and 3 in squares N9W6, N9W3, and N9E0. Remnants of a wooden wall to the coal bin were found running east-west parallel to the N9 line (see Figure 1:7). Even though the major concentration of coal was found along the N9 line, there was some coal found in Levels 2 and 3 in the majority of the twenty squares. Except for the coal bin, no other features were located.

Because of water problems and time and money constraints, it became clear that it would not be practical to excavate all twenty squares to the level of sterile soil. Furthermore, there seemed to be a fairly uniform disposition of material throughout the squares. Below Level 3 only 25% of the area was excavated. On contract archaeology projects, usually a 10% section of a site is excavated, so a 25% sample seemed acceptable.

In viewing the site problems, it seemed that the most efficient and expeditious way to excavate this sample was to select squares in a row rather than excavate single squares that were randomly placed. Using the row method, an attempt was made to maintain the walls of the squares by placing wooden shoring along the row, rather than using wood that was cut to fit a three foot square. Furthermore, a sump pit could be dug at the end of the row and be used for draining the water from the other squares. The row chosen was the W3 line from N9W3 to S3W3 (see Figure 1:7). This row was in the middle of the excavation area. It was thought that this area would have less disturbance than those squares that were closer to the 1930s foundation wall. Squares N9W3, N6W3, N3W3, and N0W3 were excavated to their full dimension (3' by 3'). Only the northern halves of squares S3W6 and S3W3 were excavated. Fieldstone protruded in the southern half of these squares along the S3 line, which made it difficult to excavate these squares in their entirety.

Squares S3W3 and S3W6 were the first squares in the row to be excavated. These two squares were excavated to a depth of three feet below the surface of the basement floor. As far as could be determined with the available light, there was no builder's trench or feature in either square. The four other squares were excavated to the following depths: N9W3 - 2'3"; N6W3 - 3'6"; N3W3 - 3'6"; and N0W3 - 2'9". Two feet below the surface, the excavation was being carried out literally in the mud. The walls of the squares were not stable without shoring. At three feet below the

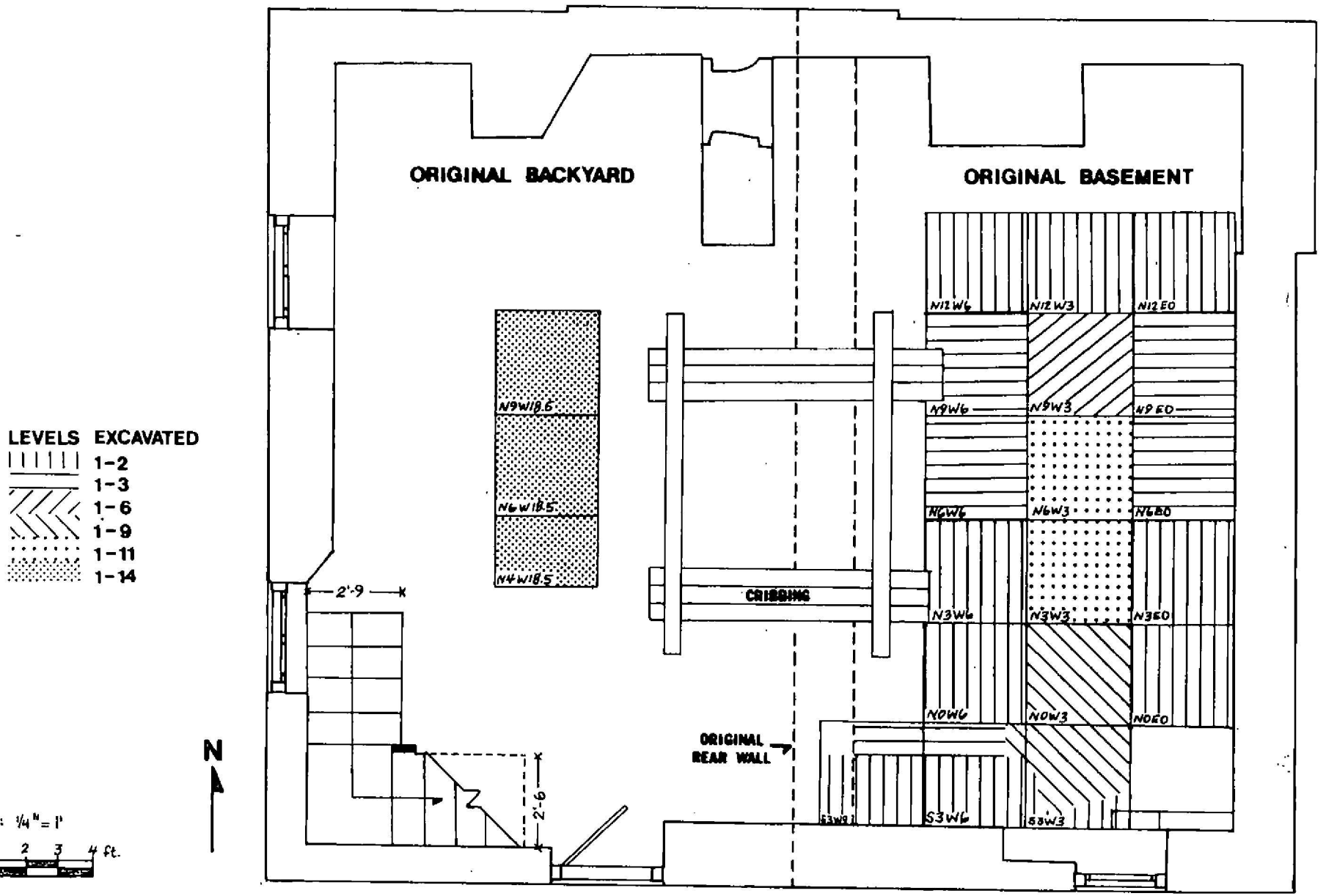


Fig. 1:7 Floor plan showing the depths of the excavation units at the Voorlezer House Site. Plan adapted from Detwiller, 1972, by Louise De Cesare.

surface, the water flowed so quickly into the squares that the sump pump could not keep up with the flow of water. Even by bucketing the water out, in addition to using the pump, not enough water could be removed to make it possible to continue with the excavation with appropriate care. Even though depth measurements were taken, it is possible that the instability of the walls and the general water conditions lead to a slippage of some artifacts from higher levels in the wall down into Levels 10 and 11. Sterile soil was not reached in any of these squares, although very few artifacts were found in Levels 9-11. The squares had to be abandoned at a depth of 3'6". At that depth, the archaeologists were standing in water and excavating into about a foot and a half of muddy water.

Original Backyard Area

After the excavation on the eastern side of the basement was abandoned, three squares were excavated on the western side of the basement. Prior to 1939, this area was in the original backyard of the house. These three squares, N4W18.5, N6W18.5, and N9W18.5, placed in a row between the cribbing and the western wall, were near the only two windows in the basement. This area was bright with both natural and artificial light. Because of the better lighting conditions, soil profiles were recorded. There was a consistency among the stratigraphy of the three squares (see Chart 1:1). These three squares were noticeably drier than the twenty squares in the eastern part of the basement. The cement footing under the cribbing seemed to have affected the underground flow of water. In the backyard area, water was encountered at about 30 inches below the surface of the dirt floor of the basement, and mud was reached at three feet. On the eastern side of the basement, water was encountered about a foot higher. In the backyard area, no artifacts were found deeper than 50 inches. The last two layers--Levels 13 and 14 contained black clay. It was very difficult to excavate these levels--there was almost a suction-like effect that made it hard to remove any dirt. Two trowels were broken during the excavation of these levels. It is possible that the few objects that were found in Level 14 actually represent the objects that fell (slipped) from a higher level. No features were found in these squares. The next chapter will describe how the artifacts were handled in the laboratory.

Fig. 1:8 Soil Strata from the Excavation Units in the Backyard Area of the Voorlezer House Site.

Levels	N4W18.5	N6W18.5	N9W18.5
1	RBSC 6" (depth from surface)	RBSC 3" turns to OB 3"-5"	GB soil(1") mixed into top layer of RBSC 4"
2	Ash lens 7"	Ash lens (SW corner) rest is RBSC 8"	Ash lens 7"
3	RBSC 13"	Ash pockets in RBSC 11"	RBSC 11"
4	Ash lens 14" MBSC 17"	RBSC 14"	Ash lens 13"
5	YBSC 19"	GBSC 19" rocks	GBSC 17" lots of shell; very rocky
6	DBSC 21"	GBSC 23" lots of shell & rocks	YGBSC 21" shell fragments
7	DBSC 25" shell & burnt bone	DBSC 27" lots of shell	DBSC 25" large sized shells
8	DBSC 29" shell & burnt bone	DBSC 29" burnt shells	DBSC 29" large sized shells
9	Water--DBSC 33" lots of shell	Water--DBSC 33" bricks & rocks	Water--DBSC 33" bricks & rocks
10	DBSC 37" lots of small brick fragments	DBSC 37"	DBSC 37"
11	DBSC 41" lots of small brick fragments	DBSC 41"	DBSC 41"
12	DBSC 45"	DBSC 45"	DBSC 45" large sized bones
13	DBSC 49" very few artifacts	BC 49"	BC 49" large sized bones
14	BC 53" no artifacts	BC 53"	BC 53"

LEGEND

RBSC: red-brown sandy clay

MBSC: medium-brown sandy clay

DBSC: dark-brown sandy clay

YBSC: yellow-brown sandy clay

GB: grey-brown

OB: orange-brown

BC: black clay

YGBSC: yellow-grey-brown sandy clay

GBSC: grey-brown sandy clay

Chapter Two: Methods of Laboratory Work

To an archaeologist, an artifact is valueless unless its context is known. Therefore, the first task of an archaeological laboratory is to ensure that the provenience of each of the thousands of artifacts found on the excavation site is accurately and permanently recorded.

This process of documentation begins in the field. As the artifacts are excavated, they are placed in paper or plastic bags. Each bag is labelled in pencil or with waterproof marker with the exact site location (the code number for the specfic excavation square and the level number indicating the depth at which the artifacts were found) and the general category of the artifacts inside (wood, ceramics, etc.). As added insurance, a piece of paper indicating the site location is placed inside the bag. Artifacts which are immediately visible are placed in the bags as they emerge from the ground. In order to find the smaller artifacts, the excavated dirt must be passed through a screen and the remaining artifacts put into labelled bags.

The archaeological laboratory may be located at the site itself or thousands of miles away, and the documentation process may begin minutes or months after an artifact is excavated. In either case, the accuracy of the conclusions of the laboratory staff is completely dependent on the precision of the labelling by the excavators.

The documentation of the Voorlezer House collection was begun in the fall of 1981 on the second floor of the house itself. Dr. Sherene Baugher and Suzanne Koslowsky, a graduate student in anthropology at Hunter College, rebagged and boxed the artifacts. In January and February of 1982, the collection was transported to the offices of the New York City Landmarks Preservation Commission, where the laboratory was located. During the next several months, under the supervision of Dr. Baugher, Ms. Koslowsky and a group of student interns washed and labelled the artifacts. The cataloguing process was begun in January 1983, by Judith Baragli, research assistant, under the supervision of Dr. Baugher and with the special assistance of Louise DeCesare, who is an archaeology major and has experience in graphic arts. The cataloguing, which was completed in December 1983, was funded by the Women's Auxiliary of the Staten Island Historical Society.

When the artifacts arrived in the laboratory, they were cleaned, using the method appropriate to them. Ceramics, glass, and smoking pipes can be soaked in water and scrubbed with a toothbrush. Shell, bone, fabric, and building and floral material must be cleaned, gently, with a dry brush. Metal must be hammered and scraped, with great care to re-

move the earth and the encrustation of rust with often disguises completely the nature of the object within.

Each artifact was then labelled with its exact site location. Care must be taken that each label is in a place that will not be obscured during the subsequent mending process. A coat of clear nail polish was applied to the spot to be labelled to ensure that the ink did not penetrate the surface of the artifact. When the nail polish was dry, the site location was written on it with indelible ink. After the ink was dry, a second layer of nail polish was applied to serve as sealer. The use of this method allows for the removal of the label should it be necessary. Artifacts which are too tiny to be labelled were placed in small containers on which the type and site location was written. When the cleaning and labelling were completed, artifacts previously grouped according to general category (for example, ceramics) were sorted into more specific categories (redware, buffware, delft, etc.).

The artifacts were then placed in plastic Ziploc bags according to specific sub-groups (e.g. transfer-printed whiteware) and site location. Each bag was labelled on the outside with waterproof marker. For the purpose of safety, a card, stating the same information, was placed in the bag.

Some artifacts were not labelled individually. Nails, for example, are usually too small, rounded and rusty to be labelled with sufficient clarity. They were catalogued by number, given an approximate date according to their physical characteristics (hand-wrought, cut, or wire), and placed in Ziploc bags which were marked with their provenience (square and level). A card stating the same information was placed inside the bag.

It is often impractical to label window glass fragments individually. The Voorlezer House has a long history of structural alterations and adjustments, and the archaeological excavation there revealed a large quantity of window glass, most of it modern. Of the 1,253 fragments excavated, only 4 pre-date 1830. Because the diagnostic value of these window glass fragments lies in the interpretation of the quantities retrieved from each separate time period, these fragments needed only to be washed, put into a time frame, counted, and then catalogued and bagged according to their site location. Each bag was labelled on the outside, and a card placed inside, with the exact site location (square and level). Of course, if a nail or a piece of window glass was found that was particularly important, interesting, and/or well-preserved, it was labelled or tagged and a special note added to the catalogue sheets. In this way, these artifacts can be easily retrieved from storage for further study or museum display.

Next, information about each artifact was entered on a

catalogue sheet. The catalogue sheet is headed with the site location and type of artifact (e.g. buffware) to be catalogued. These sheets have been prepared to meet the universal needs of a cataloguing system and also to reflect the characteristics of the artifacts found on the specific site which is to be documented. It must be possible to enter and to read the necessary data quickly and clearly. Each category of artifacts requires a catalogue sheet which is appropriate to its particular nature (see Appendix 1). For example, the total amount of brick found during an excavation is measured by weight, but ceramics must be counted.

During this cataloguing process, the archaeologist can begin to interpret the artifacts and the site. Because of the availability of documentary information about smoking pipes, ceramics, and glass bottle necks and bases, they can be dated quite precisely (Baugher-Perlin,1982 and Noel Hume, 1970). Their presence at a particular site location allows the archaeologist to assign a time span to each level.

Using a dating system devised by Mr. J.C. Harrington and refined by Dr. Lewis Binford, it is possible to date, with reasonable precision, the stems of clay smoking pipes made by the British between 1600 and 1800. During this period, as tobacco smoking methods became more "sophisticated," pipes were made with longer and longer stems and the size of the hole within these stems (bore hole) became smaller and smaller in diameter. By measuring the bore hole, and inserting this number into a mathematical equation, one can determine the date of manufacture of the pipe stem (see Appendix 2).

Changes in style and in technical development make it possible to date ceramics and glass bottle necks and bases. For example, it was not until the 1770s that English potters were able to perfect a glazing technique which allowed them to produce a ware of blue whiteness, pearlware. Pearlware became the most popular kind of ceramics until the 1830s, when whiteware began to take its place.

The presence of pearlware at a particular level tells us that the level in question can be given a date no earlier than 1770. Because of its "pearl-like" whiteness, pearlware lent itself to the application of colored designs, and the presence of particular design motifs can allow us to be more specific in dating the sherd and the excavation level at which it was found. For example, pearlware with a blue transfer — printed "willow" pattern was not produced until after 1792. Pearlware decorated with horizontal bands of color (annular ware) doesn't appear, however, until 1795; its presence at a particular level moves forward by three years the date given to that level.

Technical developments in the 19th century allow us to

determine whether bottle glass was made before or after 1820. Until that time, bottles were free-blown. Molten glass was placed at one end of a blowpipe, and the glass blower, by forcing air through the other end, rolling the molten glass on a marble or metal slab, and pulling the glass to form a neck, created a bottle. After 1820, molds began to be used to make glass. The molten glass was blown into one of a variety of molds, and removed when it was cool. These molds were hinged to allow for the removal of the bottle, and therefore leave seam marks on the finished product. The presence of seams on a bottle indicates that it was made after 1820.

When all possible dates have been recorded on the catalogue sheets, the mending process can begin. Water-soluble household glue was used so that, if necessary, the mended fragments can be separated. In addition to providing meaningful objects suitable for museum display, mended pieces give the archaeologist information about site disturbance. If fragments from different locations can be joined together, we know that those particular locations have been disturbed at some point in time and that other artifacts from those locations must be analyzed accordingly.

When all mending possibilities are exhausted and documented, the artifacts are re-bagged. The bags are then put into boxes according to category for reference and storage.

Once mending has been completed, the archaeologist returns to the catalogue sheets to assign a time span to each of the levels excavated. After the artifacts have been dated as precisely as possible on the basis of historical documentation; one can assign a time span to each of the levels excavated. Because the Voorlezer House belongs to an historic (as opposed to pre-historic) time period, a dating technique called terminus post quem (the date after which) is used. The date given to a particular level can only be later than the most recent artifact found at that level. Because artifacts have a time span as opposed to an exact date (most objects are produced over a period of time, and not "just once"), it is practical to find a mean date for each category of artifact at a particular level. This date is obtained by averaging the dates of all the artifacts of a particular category at a specific level. It must be remembered that an artifact can occasionally slip down from one level to another during the excavation. The presence of water or the instability of the soil (i.e. sandy soil as opposed to clay or silt) at the site can be the causes of this slippage. For example, if one 19th century artifact was found in a level which contained 17th century artifacts, it could be assumed that the 19th century artifact slipped from a higher level into this lower level.

The principle of terminus ante quem (the date before

which) can also be used to date a level. This dating technique is based on the assumption that the absence at a particular level of a type of artifact for which the date of origin is documented indicates that the level pre-dates that date of origin. For example, it is known that pearlware did not come into being until the 1770s and that is was a very popular ware. Therefore, if the archaeologist finds no pearlware at a specific excavation level, he may assume that the level pre-dates 1770.

One can then average the mean dates of all of the types of artifacts at a particular excavation level to find the mean date of that level. A mean date is a very useful working tool for the archaeologist, but it must be remembered that it is arbitrary. For better or worse, people's habits do not fit tidily into categories which are established by stylistic and/or technological changes. Except for the case when an archaeological site is abandoned suddenly because of a specific event (the volcanic eruptions at Pompeii, for example), most of the artifacts found during excavation are discarded objects. Some people are clumsier than others. Some are poor and hold onto things, even if they aren't in perfect condition, for a long time. Others become increasingly affluent and replace their "old stuff" for objects more appropriate to their status. Some objects are kept as keepsakes or heirlooms for a very long time, and are discarded only because they finally break or are no longer appreciated by the younger generation.

In addition, the archaeologist sometimes discovers that the soil has been disturbed by nature or man, and that the artifacts in the soil have been churned about in such a way that their position in the ground loses its meaning. Flooding or water seepage can shift the soil. Cultivating earth for farming and laying underground pipes are two examples of ways that artifacts can be, chronologically, turned upside down. The archaeologist can sometimes see clear evidence of soil disturbance while excavating. Being able to mend together artifacts which have been unearthed at different site locations and levels is another sign that the provenience of these artifacts is to be studied carefully and cautiously.

If the analysis of the artifacts is to be valid, the archaeologist must bear in mind the documentable causes and the whims which can account for the presence of the artifacts he is studying.

Finally, the archaeologist studies the collection in terms of numbers. A total count was made of all the artifacts and of each of the groups and sub-groups. Percentages and ratios for each type of artifact and site location were calculated. Charts, graphs, and lists were made. For example, the ratios of domestic to architectural artifacts and of porcelain to redware at a site location supply information

about the predominant use of the site and the economic status of its inhabitants. All of these calculations were combined with the information learned from the mending process and the dates assigned to each level to interpret the specific uses of the site through time.

In the following chapters, we will discuss the artifacts in terms of what they reveal about the documentary and architectural history of the Voorlezer House and the way of life of its inhabitants.

Chapter 3: Dating the Site

Introduction

This chapter discusses the specific diagnostic artifacts (ceramics, bottle glass, clay smoking pipes, and nails) found within each level during excavation at the Voorlezer House site, and assigns a date range to each of these separate levels. The basement area is examined first, followed by the backyard area. Consideration is given to problem squares and levels and to apparent intrusions. A problem with one of the dating techniques (pipe stem dating) and why it proved to be unsuitable to this site is also discussed. The conclusion of this chapter examines the similarities and differences between the artifacts found in the basement and backyard area of the Voorlezer House.

Basement: Problem Square

As mentioned in Chapter One, it was not possible to follow the natural stratigraphic levels during the excavation of the basement section of the site. In analyzing the artifacts, it became apparent that there was major disturbance in square N6W3.

The ceramic cross-mending revealed that three reconstructed vessels were comprised of sherds from Levels 2 through 6. A blue transfer-printed whiteware cup was mended with sherds from Levels 2 and 6; a pearlware bowl had sherds from Levels 5 and 6; and a pearlware lid to a teapot contained fragments from Levels 3, 5, and 6 (a sherd from the border of the adjoining square, N9W3 Level 4, was also part of this lid). In addition, the datable bottle glass from N6W3 Level 5 ranged from early 19th century hand-blown bottle glass to early 20th century machine-made bottles.

Not being able to see the soil profiles made it impossible to know how wide a disturbance occurred here. Was it caused by digging a pit for a support beam or by some other early 20th-century structural change within the basement? Whatever the reason, someone in the 20th century dug into this area and the material which was placed back into this pit mixed artifacts from different soil levels.

When the lower levels of N6W3 were being excavated, the water problems made it difficult to maintain straight walls. The two artifacts from the adjacent squares (the N9W3 L4 pearlware sherd from the teapot lid and a small machine-made perfume bottle from N3W3 L7) appeared to be intrusions and were probably from the areas shared with N6W3 (see Figure 1:7). If we eliminate square N6W3, then patterns do emerge.

Problems with Pipestem Dating

All of the smoking pipestems unearthed in the basement area of the Voorlezer House dated between 1753 and 1779 (see Figure 3:1). However, the other diagnostic artifacts dated most of the basement levels as either 19th or 20th century. This same problem with dating was found in the backyard area; pipestems dating to 1749 to 1779 were found in levels that dated to the 19th century (see Figure 3:2).

Archaeologist Lewis Binford (1961: 19-21) notes that he finds the formulas for dating kaolin pipestems are useful only for the period 1620-1780, and that after 1780 there was variation in the stem hole diameters with a reoccurance of the diameters of some of the earlier pipes.

Since pipestem dating is a relatively quick and easy technique, it was used on all of the kaolin stem fragments from the Voorlezer House collection. Eighteenth century pipestem dates were obtained for levels containing nineteenth or twentieth-century artifacts (see Figures 3:3, 3:4 and 3:5), thus confirming what Binford found when he applied this technique to stems from a post-1780 site.

Decorated pipe bowls are useful diagnostic tools for specific information on dating (Noel Hume 1969, Reid 1976, and Walker 1977). The two pipe bowls found in the basement area bore the word "TIPPET," the trademark of the English pipemaker, Robert Tippet. According to clay smoking pipe expert, Diane Dallal, the Tippet pipes were made in Bristol, England and are in the style used by the third Robert Tippet in the mid-eighteenth century. Dallal analyzed 7,000 pipe fragments that were unearthed in January 1984, at the excavation of the 100 Broad Street site in lower Manhattan. Those 7,000 fragments were from pipes made by the first and second Robert Tippets, and these pipes had a date range of 1678-1720. The two Tippet pipes from the Voorlzer House site are unlike these earlier pipes. The Voorlezer House pipes have a stem diameter of 4/64 ths. which has a date range of 1750-1800. Dallal believed that the shape, style of decoration and pipe stem diameter suggest a date of 1750-1760s for these pipes.

Basement: Levels 1 through 3, Twentieth Century

These levels contained numerous ceramics which cross-mended among the levels. The mended objects were of the following ceramic types: whiteware, pearlware, creamware, and buffware. The chart of mended pieces (see Figure 3:6) shows that disturbance occurred both horizontally and vertically. This disturbance, which appeared in the first two feet of the dirt basement, may have occurred in 1939, when the house was

Site: Voorlezer House: Basement

Figure 3:1 Smoking Pipes

Levels	Stem hole diameter 4/64 frag	4/64 prod	5/64 frag	5/64 prod	6/64 frag	6/64 prod	Total Number frag	Total Number prod	"x"	MEAN DATE
1	2	8	4	20			6	28	4.66	1753
2										
3	5	20	2	8			7	28	4.00	1779
4	1	4	2	10			3	14	4.66	1753
5	1	4	4	20			5	24	4.80	1748
6	5	20	8	40			13	60	4.61	1755
7	3	12	6	30			9	42	4.66	1753
8	1	4					1	4	4.00	1779
9										
10										
11										
12										
13										

Site: Voorlezer House, Backyard Area

Figure 3:2

Smoking Pipes

Levels	Stem hole diameter 4/64 frag	4/64 prod	5/64 frag	5/64 prod	6/64 frag	6/64 prod	Total Number frag	Total Number prod	"x"	MEAN DATE
1										
2										
3	1	4					1	4	4.00	1779
4	1	4	2	10			3	14	4.66	1753
5			7	35			7	35	5.00	1741
6	1	4	1	5			2	9	4.50	1760
7	1	4	5	25			6	29	4.83	1747
8										
9	1	4	2	10			3	14	4.66	1753
10										
11	12	48	11	55	3	24	26	127	4.88	1745
12			2	10			2	10	5.00	1741
13			1	5			1	5	5.00	1741
14	1	4	2	10			3	14	4.66	1753

Site: Voorlezer House: Basement

Figure 3:3

Ceramic Totals

Levels	Ware types: White	Pearl	Cream	Porcelain	Stone	Red	Buff	Delft
1	109	11	5	12	13	19	9	2
2								
3	66	4	19	4	10	66	1	
4	16	7	2	2		7	1	
5	5	10	11	2	5	4		
6	12	30	12	6	6	14		
7	4	2	6	2	2	5	2	
8				1	1	1		
9			1	4		1		
10			1					
11								1
12								
13								
14								

Site: Voorlezer House: Basement Area

Figure 3:4

ARCHITECTURAL TOTALS

Levels	TYPES						
	window glass	NAILS			nuts/bolts screws	tools	Misc. arch.
		hand-wrought	cut	wire			
1	436	15	106	70	3		21
2							
3	534	1	27	15	5		23
4	14		16	2		1	1
5	54	3	11	2	1		3
6	6	12	4		1	1	4
7	6	7					2
8	6	1					
9	2			1			
10							1
11							
12							
13							
14							

Voorlezer House: Basement

BOTTLE GLASS: LIPS AND BASES
Figure 3:5

TIME PERIODS

LEVEL	1700-1800	1800-1870	1870-1903	1903-1930	POST 1930
1		3	9	23	
2				1	
3		4	11		
4			4		
5		3	1 (N6W3)	3 (N6W3)	
6		1	1		
7				1 (N3W3)	
8					
9			1		

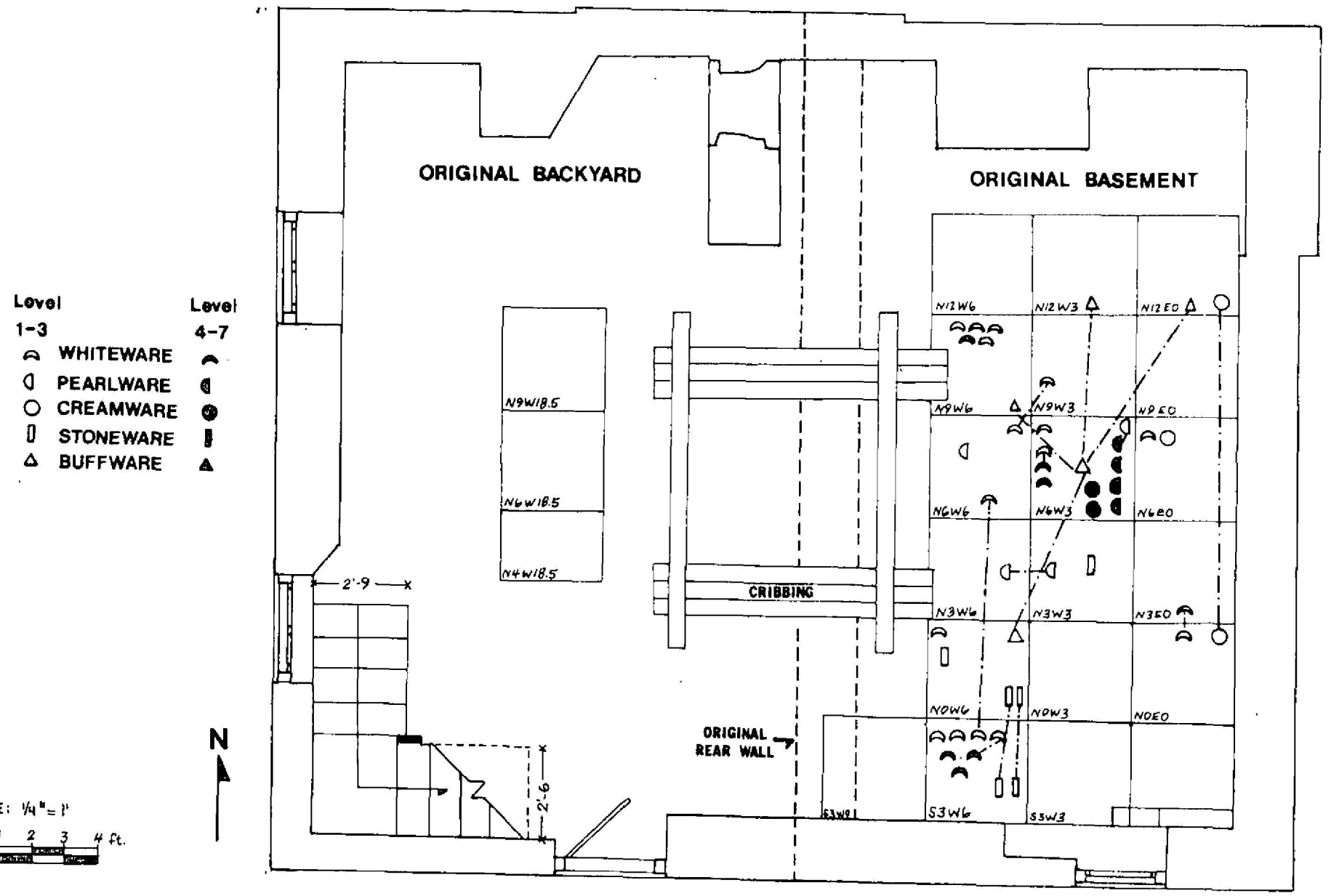


Fig. 3:6 Voorlezer House Site (Basement): Distribution of Mended Ceramics

moved to its present position, 15 feet to the west of its original foundation.

Of the 1,058 fragments of window glass found in the basement, 970 sherds (or 91%) were from the first three levels (see Figure 3:3). Of the 293 nails and spikes from the basement, 234 artifacts (or 80%) were found in these first three levels. In addition, 79% of the other diagnostic architectural artifacts were found in the first three levels of the basement. This is not surprising given the extensive alteration and restoration work on the building.

In terms of the household items found in the first three levels, the material dated from mid-19th century through the 1930s. Of the 51 datable bottle lips and bases, 47 were from machine-made bottles. All of the 20th century bottles were found in Levels 1 and 2; late 19th-century bottles were unearthed in Level 3. Of the 350 ceramic sherds from Levels 1-3, 175 sherds (50%) were whiteware. 150 (86%) of these whiteware sherds were undecorated "hotel china" which dates from 1830 to the early 20th century. There were 171 non-whiteware sherds, which were all 19th-century wares, although some had a date range of 1850-1920. Only two pieces of delft, one redware sherd, and one porcelain sherd dated to the 18th century.

These three levels contained primarily 19th and early 20th-century material. Given the fact that a number of ceramic objects cross-mended from all three levels, we must give these stratum a 20th-century date.

There was a very marked change in the total number of objects found in Levels 4-10 versus Levels 1-3 (see charts on ceramic, architectural, and bottle glass totals--Figures 3:3, 3:4, and 3:5).

Basement: Level 4, 1870-1900

This level had a date range of 1870 to 1900. The four datable bottles were all post-1870, but not machine-made (pre-1903). Of the 18 nails, 89% (16 nails) were 19th-century cut nails, while 11% (2 nails) were wire nails.

In dating the nails from the Voorlezer House, the percentage of cut to wire nails was compared in order to determine a 19th or 20-century date for the level. The invention in 1773 of the square cut nail is credited to Jeremiah Wilkinson of Rhode Island (Dorr 1969: 682). Depending on the type of head and the presence of "waisting" found below the head, cut nails can be divided into three time periods: 1) pre-1815, 2) 1815-1830, and 3) 1830-present. The Voorlezer House nails were so severely rusted that it was impossible,

in most cases, to make these distinctions. Therefore our cut nails must be put into a broad range: 1777-present. However, one must remember that cut nails were produced in relatively small quantities after 1895.

Wire nails date post-1850, although they were not being produced in sufficient quantities to provide easy availability until the last quarter of the 19th century. In 1888, wire nails represented less than one-fifth of the total nail production of the United States, but by 1895 they represented just under three-quarters of that production(Fontana and Greenleaf 1962: 48).

Because of the presence of both the wire nails and the bottles, the collection dated after 1870 (terminus post quem). However, no identifiable 20th-century material was uncovered (terminus ante quem) so the end date for the level was 1900. No artifacts from other levels cross-mended with objects from Level 4.

Basement: Levels 5 & 6, 1820-1850

All of the datable bottle glass was pre-1850. Of the 30 nails, 50% were cut nails and 50% were 18th-century wrought nails. There were 2 wire nails from the problem square. Stoneware, creamware, pearlware, and whiteware were found in both levels. The white salt-glazed stoneware had a date range of 1720-1805. The hand-painted pearlware dated 1795-1830. The 17 sherds of whiteware dated post-1820.

Both the absence of wire nails and the presence of creamware and pearlware would suggest a date in the early part of the 19th century. To be conservative, a date range of 1820-1850 can be given to this level.

Basement: Level 7, 1800-1820

There was no datable bottle glass. The only nails were seven wrought nails. There were pearlwares, creamwares, porcelain, and four sherds of whiteware. The stoneware, buffware, and redware sherds could not be assigned to a narrow date range.

This level may range from as early as 1800 to the 1830s. One would expect to find more whiteware and some cut nails and stoneware in the second quarter of the 19th century, as was found in the previous level. It is not unusual to find some time lag in the acquisition of new products. This may be due to the availability of the products, the cost, or simply conservative personal taste on the part of the buyer. However, these products (whiteware dishes, cut nails, stoneware crocks) are goods which one would expect to encounter on

a mid-19th-century site.

Given the datable objects in Levels 5 and 6, Level 7 seemed to date to the early 19th century.

Basement: Levels 8-11, 1762-1800

Very few datable artifacts were found in Levels 8-10. Only one wrought nail (Level 8) and no cut nails were unearthed. One wire nail found in S3W3 was probably the result of slippage since no other artifacts found in these levels dated even post-1800, let alone post-1850. No diagnostic artifacts were uncovered in these levels; the post-1830 window glass was unearthed in the problem square.

Eleven ceramic sherds (creamware, porcelain, stoneware, redware, and delft) were found in Levels 8-11. The stoneware, porcelain and delft sherds were decorated. The creamware sherds could have been manufactured as early as 1762, although cream-colored wares were manufactured throughout the 19th century (Miller 1980: 3). The delftware sherd dated to anytime in the 18th century. The stoneware and porcelain sherds dated to the late 18th century.

One could date this level between 1762 and 1780 (terminus ante quem because of the absence of pearlware). The Tippit smoking pipe bowl found in Level 8 dated to 1750-1760s; no datable smoking pipe bowls were found in the other levels. When the artifacts from Levels 8-11 were compared to those from Level 7, some similarities were observed. In these four levels, there were no cut or wire nails, and no bottle glass. However, there were noticeable differences. There was no delftware in Level 3-10; the delft sherd in Level 11 was in an appropriate context.

Levels 8-11 seemed to be older that Level 7, giving these levels a date range of 1762-1800.

Backyard: Level 1, 20th Century

This is an early 20th-century level. Very few datable artifacts were found. Of the eleven ceramic artifacts unearthed, only one sherd (porcelain) was clearly 20th century; the others were late 19th-century wares. No datable bottle glass or nails were found.

Backyard: Levels 2-4, 1870-1890

These levels alternated with red-brown soil and pockets of ash to ash lens (see Chart 1:1,soil chart). This similarity of the soil and the artifacts found in these levels was demonstrated by the fact that sherds of pearlware from Level

2 mended with pearlware from Level 4 (see Figure 3:7).

These levels seemed to date post Civil War. Of the 27 nails, 92% were cut nails. With such a high percentage of cut nails versus wire nails, a date between 1850 and 1890 was suggested. However, since wire nails made up 8% of the total nail count, it was more exact to give a post Civil War date to these levels.

In terms of ceramics, the broad date range of the wares was 1820 to the late 19th century. Ceramic historian George Miller (1980:4) notes that, beginning in the mid-1850s and continuing through the 1870s, undecorated dishes were very popular. Of the 47 ceramic artifacts in Levels 2-4, the predominant ceramic type was undecorated whiteware (40%), followed by undecorated pearlware (19%). There was one sherd of Rockingham ware, which dated from the mid to late 19th century (Spargo 1972: 171). After the Civil War, the United States' whiteware industry developed rapidly, with centers in East Liverpool, Ohio and Trenton, New Jersey (Guilland 1971: 96). Given the date of the wire nails, it is possible that these whitewares were American-made.

Backyard: Level 5, 1850-1870

In terms of stratigraphy, there was a marked change in soil color from Level 4 (red-brown) to Level 5 (yellow-grey-brown). This level was filled with rocks.

There was also a noticeable change in the variety and number of artifacts. Of the 78 nails, 88% were cut, 3% were wire, and 9% were 18th-century hand-wrought nails (see Figure 3:8).

Among the 18 ceramic artifacts, there was an equal number of whiteware and pearlware sherds (see Figure 3:9). Both undecorated and transfer-printed pieces were present. The stoneware and porcelain artifacts were from the 19th century, but the one piece of delft dated from the 18th century. No sherds cross-mended with pieces from another level.

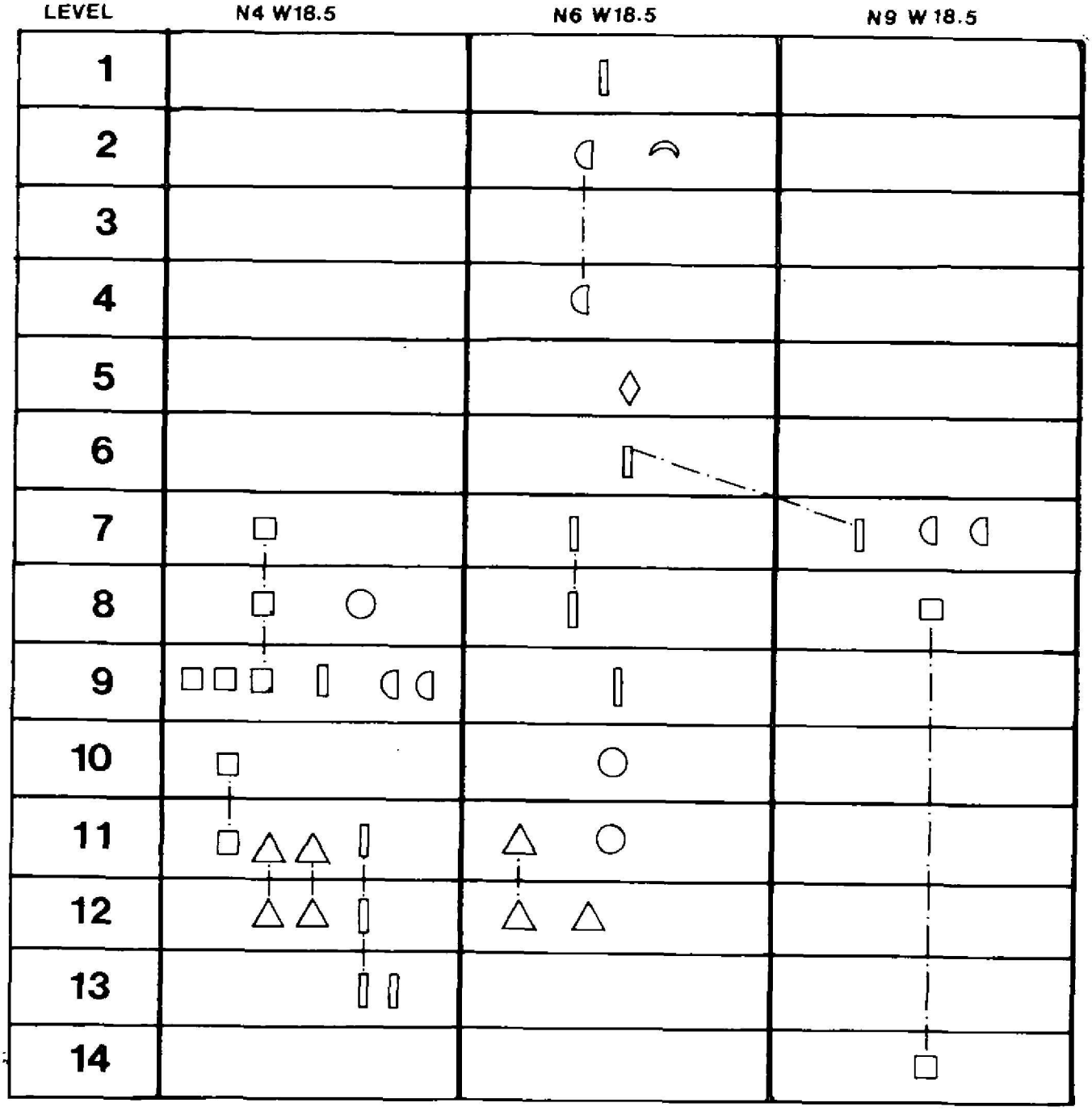
The time period for this level could have ranged from 1820-1870, but because of the presence of wire nails, probably dated 1850-1870.

Backyard: Level 6, 1820-1850

There was a slight change in the soil in this level. It was grey-brown and filled with lots of rocks and shell fragments. This was the first backyard level with no wire nails (there are 27 cut nails and no wrought nails), thus dating this level pre-1850 (terminus ante quem).

Fig. 3:7

VOORLEZER HOUSE SITE (BACKYARD)
DISTRIBUTION OF MENDED CERAMICS



Site: Voorlezer House

Backyard Area

Figure 3:8

ARCHITECTURAL TOTALS

Levels	TYPES						
		NAILS					
	window glass	hand-wrought	cut	wire	nuts/bolts screws	tools	Misc. arch.
1							
2							
3	6		15	1			1
4	5		10	1			
5	6	7	69	2		1	2
6	12		27		2		1
7	51	4	39				
8	19	13	6				
9	29	9					
10	23	9	8				1
11	33	2	3				1
12	10	2					
13	1	1					
14	4		1				

Site: Voorlezer House: Backyard Area

Figure 3:9

Ceramic Totals

Levels	Ware types: White	Pearl	Cream	Porcelain	Stone	Red	Buff	Delft
1	6			2	2	1		
2	8	3						
3	9	3		6			1	
4	9	4			2	1	1	
5	5	5		3	1	3		1
6	1	9			1	9		
7	2	30	4	4	14	16	2	
8	1	11	12	6	7	17	2	1
9		20	10	2	11	34	1	
10	1	6	9	3	5	12	9	2
11		3	7		11	2	17	7
12					3	5	30	2
13					10			
14					1	4		

In ceramics, there was a noticeable difference, with the rate of whiteware to pearlware changing from 72% whiteware in Levels 2-4, to 50% whiteware in Level 5, to 10% whiteware in Level 6. The Level 6 whiteware was a transfer-printed ware, while the pearlware contained the first evidence in the backyard of Annularware and handpainted wares, popular in the first quarter of the 19th century. Some of the redware sherds were Jackfield-like wares (a style popular in the 18th century) while the others (77%) were styles used in the 19th century. The one stoneware sherd in Level 6, which cross-mended with the two stoneware sherds from Level 7, was probably found at the transition point between the two levels. With the exception of this single cross-mend, Levels 6 and 7 were quite different in their soil and artifact composition, and represented two separate time periods.

This level probably dated 1820-1850.

Backyard: Level 7, 1795-1820

This level had dark brown sandy soil and contained a great deal of shellfish remains.

Of the 43 nails, 91% were cut, and 9% were handwrought. There was a noticeable increase in ceramic totals in this level -- 72 sherds were unearthed. The ratio of whiteware to pearlware was 6:94. The pearlwares were transfer-printed, hand-painted, edged, and undecorated wares. This was the first backyard level to contain creamware. In addition, 18th-century Oriental Export porcelain and 18th to early 19th century stoneware were found. There was one wine bottle with a sand pontil mark which could date to the 18th century (see Figure 3:10).

This level dated from 1795-1820.

Backyard: Level 8, 1795-1820

This level had the same soil color and large amounts of shells as Level 7. There was a noticeable change in the nails. Of the 20 nails unearthed, 30% were cut nails and 70% were wrought nails.

Of the 57 ceramic artifacts, there was an increasing number of 18th-century sherds. There was only one whiteware sherd, making the whiteware-pearlware-creamware ratio 3:47:50. The stoneware, delft, British slipwares, and Oriental Export porcelain were 18th-century wares.

Because of the one whiteware sherd, Level 8 dated from 1795-1820. This level contained more slightly older material than Level 7, although Levels 7 and 8 may have represented artifacts deposited by the same family over a twenty year period. Levels 7 and 8 were similar in both soil and arti-

Figure 3:10

Voorlezer House : Backyard
BOTTLE GLASS: LIPS AND BASES

TIME PERIODS

LEVEL	1700-1800	1800-1870	1870-1903	1903-1930	POST 1930
1					
2					
3					
4					
5					
6					
7		1			
8					
9		1			

fact composition. Sherds from a stoneware crock cross-mended from Levels 7 and 8.

Therefore, Levels 7 and 8 could be given the same date range, 1795-1820.

Backyard: Level 9, 1780-1800

The soil color was still dark brown, but there was a noticeable absence of shell. There were no cut or wire nails, and only 9 wrought nails in this level. One fragment of a medicine bottle with a sand pontil mark (giving it a date range of 1700-mid-1800s) was unearthed.

There was no whiteware in this level. Of the 66 ceramic sherds, 12% were pearlware and 15% were creamware. The handpainted pearlwares dated to the late 1700s. The stoneware and porcelain sherds were all 18th-century wares. The one redware sherd that cross-mended with the object in Level 7 may have represented slippage. All of the other mended wares in Level 9 were from that level exclusively.

The lack of whiteware and cut nails in Level 9 gave it, at least, a pre-1820 date. Level 9 had a date range of 1780-1800 with a strong likelihood of being closer to 1800.

Backyard: Level 10, 1780-1800

The soil color in this level was still dark brown. Of the 17 nails, 53% were wrought nails and 47% were cut nails.

Of the 47 ceramic sherds found, one was whiteware (2%), 6 were pearlwares (13%), and 9 were creamwares (19%). The one whiteware sherd may have been the result of slippage since the other artifacts dated mainly from the 18th century. There were five 18th-century stoneware sherds, one of which was from a German (Rhennish) bottle. Eighteenth-century British yellow slipwares, and American redware, and two pieces of 18th-century delft were uncovered.

This level dated to the late 18th century (1780-1800) and, based on the ceramic sherds found here, seemed to be slightly older than Level 9.

Backyard: Level 11, Transitional

No soil color change was observed in this level. Of the four nails found, one was a wrought nail, and the other three were cut nails.

Forty-seven ceramic sherds were unearthed. Six percent were pearlwares, all of which were hand-painted -- a style popular in the late 18th century. Fourteen percent of the

ceramics were creamwares. Of the delftware, four sherds dated from the late 17th through early 18th century. Of the eleven stoneware sherds, seven were British salt-glazed stoneware, which dates 1720-1805; the other sherds were all local stoneware. The buffware cross-mended (3 different vessels) between Level 11 and 12. It appeared that part of Level 11 was linked with refuse deposited during the same time period represented by Level 10. There was a cross-mend of a redware vessel with sherds from Levels 10 and 11, and part of Level 11 was linked with a different deposition.

Level 11 was a transitional level.

Backyard: Level 12, 1750-1770

No soil color change was noted in this level. The only two nails were wrought nails. The white salt-glazed stoneware and British yellow slipwares dated to the mid-1700s. The two delftware sherds date to the mid-18th century (Archer and Morgan, 1977). There was no pearlware or creamware.

Some archaeologists have noted a time lag in the manufacture of British goods and their appearance on the American market (Noel Hume, 1972). The absence of creamware can give this level a pre-1762 date, although creamwares may have been purchased by the non-aristocratic family only after creamware was better known and more popular in the Colonies (circa 1770s).

This level had a date range of 1750-1770.

Backyard: Levels 13 and 14, 1740-1760

There was a dramatic soil color change in this level -- from dark brown sandy soil to black clay. The black clay appeared to be sediment from a stream or pond.

Very few artifacts came from these levels. Two nails were uncovered, one cut and one handwrought. The presence of the cut nail may have been the result of slippage. No datable bottle glass was found.

Only 15 ceramic sherds were unearthed: eleven were stoneware and four were redware. The white salt-glazed stoneware (most of the sherds were from a single teacup) dated as early as 1720 with a mean date of 1740-1765. The slippage sherds of redware were 18th century (a more specific date cannot be given). The lack of creamware would give these levels a pre-1760 date.

These levels can be given a date range of 1720-1760, although a tighter range of 1740-1760 was strongly indicated.

Conclusion

This chapter discussed the diagnostic artifacts that were used to date each level in the backyard and basement of the Voorlezer House. These artifacts had a date range of 1740-1940. The archaeological record showed no artifacts which indicated that the site was being used before 1740. The historical record indicated this particular parcel of land was owned by European settlers as early as 1686. Therefore, the lack of artifacts dating 1686-1740 raised some serious questions which must be answered.

An obvious question was whether the colonists in the 17th and early 18th centuries were using only those objects which would have decomposed in the ground and therefore leave no archaeological evidence. The answer was to be found in the presence of the many artifacts unearthed during other New York City excavations.

Since 1979, there have been seven major archaeological excavations in Lower Manhattan, under the jurisdiction of the New York City Landmarks Preservation Commission.[1] The archaeologist for the City of New York, Sherene Baugher, monitored the work on all seven projects. Four of the sites (the Stadt Huys, 7 Hanover Square, Broad Street, and Barclay Bank site) contained artifacts from the 17th and early 18th centuries. From the findings of these excavations archaeologists know that wooden objects have decomposed, while ceramic, glass, and metal objects often have survived. While gold, silver, and pewter artifacts survive in the soil, these objects were so valuable that families took special care of them and, consequently, these objects are found infrequently on archaeological sites. The most numerous 17th and early 18th-century artifacts found on these four Lower Manhattan sites were: ceramics; architectural materials such as bricks, nails, and window glass; clay smoking pipes; and glass bottles.

Archaeologists have recovered numerous artifacts from the mid-1660s to the early 1700s; consequently we know that these objects can survive in New York City soil. Were the soil conditions at the Voorlezer House different from those in Lower Manhattan? Because of the large concentration of oyster and clam shells in the ground, the soil at the Voorlezer House site was alkaline, and this alkalinity permitted very good preservation of the artifacts. Animal bones and glass were in better condition at the Voorlezer House site than similar objects found on some of the Manhattan sites.

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[1] The seven Lower Manhattan excavations are: the Barclay Bank Site (1984); 7 Hanover Square (1981); 100 Broad Street Site (1984); the Stadt Huys Site (1980); Shearson/Lehman/

Therefore, it is unlikely that, under these alkaline soil conditions, material from 1680-1740 would have decomposed, while artifacts dating between 1740 and 1940 would have survived.

It is known that 20th-century construction often destroys earlier material; many sites with well-documented histories no longer exist because of modern construction work. At the beginning of the Voorlezer House site excavation, it is not clear if the 1939 renovation work (which included moving the house and foundations) had severely disturbed the site. In both the original basement area and the original backyard area of the Voorlezer House, stratified artifact deposits were unearthed. Therefore, it is difficult to imagine that 20th-century construction work would have destroyed the 1680-1740 material and left the other layers intact.

It is possible that construction work in the 1740s obliterated material from earlier times. In addition, a natural disaster, such as flood, could have washed away earlier artifact deposits. Or it is possible that the lack of 1680-1740 artifacts is due to the fact that the site was not occupied prior to 1740. In order to evaluate more fully the archaeological evidence for the 17th and early 18th century use of the site, more field testing should be done.

The site has a clear two hundred year history buried in its ground. We would recommend that archaeological testing be done prior to any new construction work or landscaping. It is quite possible that wells, privies, and cisterns are located in the sideyard or backyard area of the site. These features are time capsules that contain artifacts which were discarded many years ago. Further testing would either confirm the current findings (that the site was occupied only from 1740 to 1940) or provide new data revealing an earlier use of the house.

The archaeological data can reveal new information about the lifestyles of the 18th, 19th, and 20th century occupants of the Voorlezer House. Chapter Five describes the similarities and differences in the various backyard and basement deposits and presents an interpretation and analysis of the archaeological finds.

In the following chapter (Chapter 4) the documentary and archaeological data is combined in order to tie the artifacts to specific inhabitants of the site.

American Express Site (1984); 60 Wall Street (1984); and 175 Water Street (1982).

Chapter 4: The History of the Voorlezer House Site

The aim of this chapter is to trace the use of the Voorlezer House through time. We present a synopsis of earlier historical evidence and add new data which we uncovered. This chapter will provide the historical foundation for the following chapter on the archaeological analysis of the site. In Chapter Five we integrate the available documentary information with the archaeological data in order to tie the individual excavation levels to particular residents. In this manner, the artifacts which were unearthed during the 1981 excavation of the Voorlezer House site can add to our understanding of the people who lived and worked there.

This chapter will evaluate the site's use over the last three hundred years. We found and carefully studied the primary sources cited in other historical reports and checked the secondary sources which were listed as references. Even though this chapter represents a more complete documentary study than previous reports, the grant budget limited the amount of historical research that could be done as part of this project. Consequently, this chapter will raise some questions which will require further research.

Deeds, wills, mortgages, census records, tax records, and maps were used. We read and evaluated the published and unpublished reports on the Voorlezer House which are on file in the archives of the Staten Island Historical Society and The Staten Island Institute of Arts and Sciences.

The previous chapter explained the methods used for dating each excavation level. Because artifacts were discarded during various time periods, the archaeological record shows different sequences of artifact deposition (refuse disposal) on the site. Changes in the archaeological record reflect the times when there were changes in the site's occupants; different artifacts were deposited by different families. Figure 4:1 illustrates the site's the archaeological levels, time periods, and resident families. The site was sufficiently stratified to discuss changes in its use from 1740 to 1940. The earliest archaeological evidence pertains to the period when Jacob Rezeau owned the property in the 1740's.

FIGURE 4:1 THE OCCUPANTS, TIME PERIODS AND THE ARCHAEOLOGICAL LEVELS CONTAINING ARTIFACTS ASSOCIATED WITH THESE SPECIAL FAMILIES.

BASEMENT LEVELS	BACKYARD LEVELS	TIME PERIOD	OCCUPANTS
1-3	1	20th century	Nicholas George The Rosenbergs
4	2-4	1870-1900	The Rosenbergs The Mooneys
	5	1850-1870	Susannah Van Pelt and Harriet Wheatley
5-6	6	1820-1850	Susannah Van Pelt and Harriet Wheatley
7	7-8	1800-1820	The Van Pelts
8-10	9-10	1780-1800	The Johnsons
	11-14	1740-1770	The Rezeaus

The Rezeau family owned the land constituting the site of the Voorlezer House for 161 years (1705-1872). A history of the family and its use of this land will be presented in this chapter. The documentary evidence for the archaeological period (1740-1940) will be discussed in detail. Because no 17th century archaeological material was unearthed at the site, this chapter cannot address the possible use of the property as a voorlezer's house. In the Archives of the Staten Island Historical Society there are numerous articles on file about the Dutch Congregation's ownership and use of the site in the 1690's. Only a brief discussion of the period 1680-1705 will be given.

The History of the Site Before 1705

In 1661, a group of French and Dutch settlers established the first permanent community on Staten Island, near what is now South Beach (Steinmeyer, 1950: 10). Three years later, England pre-empted all Dutch territory in the New Netherlands, although the Dutch briefly reoccupied New York from 1673 to 1674.

In the 1680's and 1690's, land grants were made for property in what was to become Richmondtown. In 1680, Governor Edmund Andros, on behalf of the Crown, granted 320 acres of land, plus 37 acres of salt meadow, to Robert Rider, gentleman (Book of Patents #5, p. 28). The neighboring property (in the heart of Richmondtown) belonged to Arent Prall, wheelwright (Book of Patents #7, p. 5). Figures 4:2 and 4:3 outline the location of the original land grants for Richmondtown.

After Robert Rider's death, his property was sold in 1686 by the executors of his estate to Anthony Fountain (Liber B of Deeds, p. 33). When Anthony Fountain died in 1696, he left the property to his son, Vincent.

In the period 1696 to 1705, the property on which our archaeological site is located changed hands seven times (See Appendix 3 for a chronology of this change of title). There was land speculation in the small but developing hamlet of Richmondtown. For example, the Prall land, which was the northern boarder of the Robert Rider patent, was sold about once every fifteen years, usually to non-relatives (Baugher-Perlin 1978: 113). The property containing the Voorlezer House site changed owners with much greater rapidity: between 1696 and 1705, no owner kept the property for more than three years. However some of these land transfers were between related families.

In 1696, Vincent Fountain, gentleman, sold 160 acres and 18 1/2 acres of salt meadow (from the 360 acre Rider patent) for forty-four

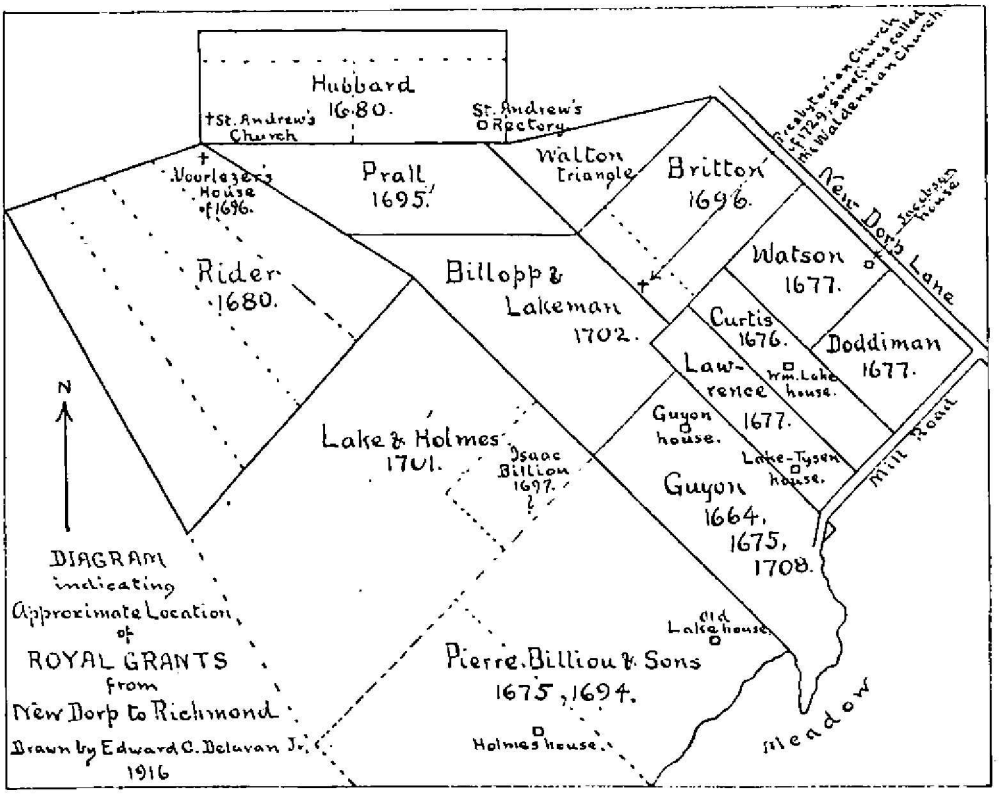


Fig. 4:2 Map by Delevan (1918) showing the original land grants for the central part of Staten Island. Location of the Voorlezer House is given.

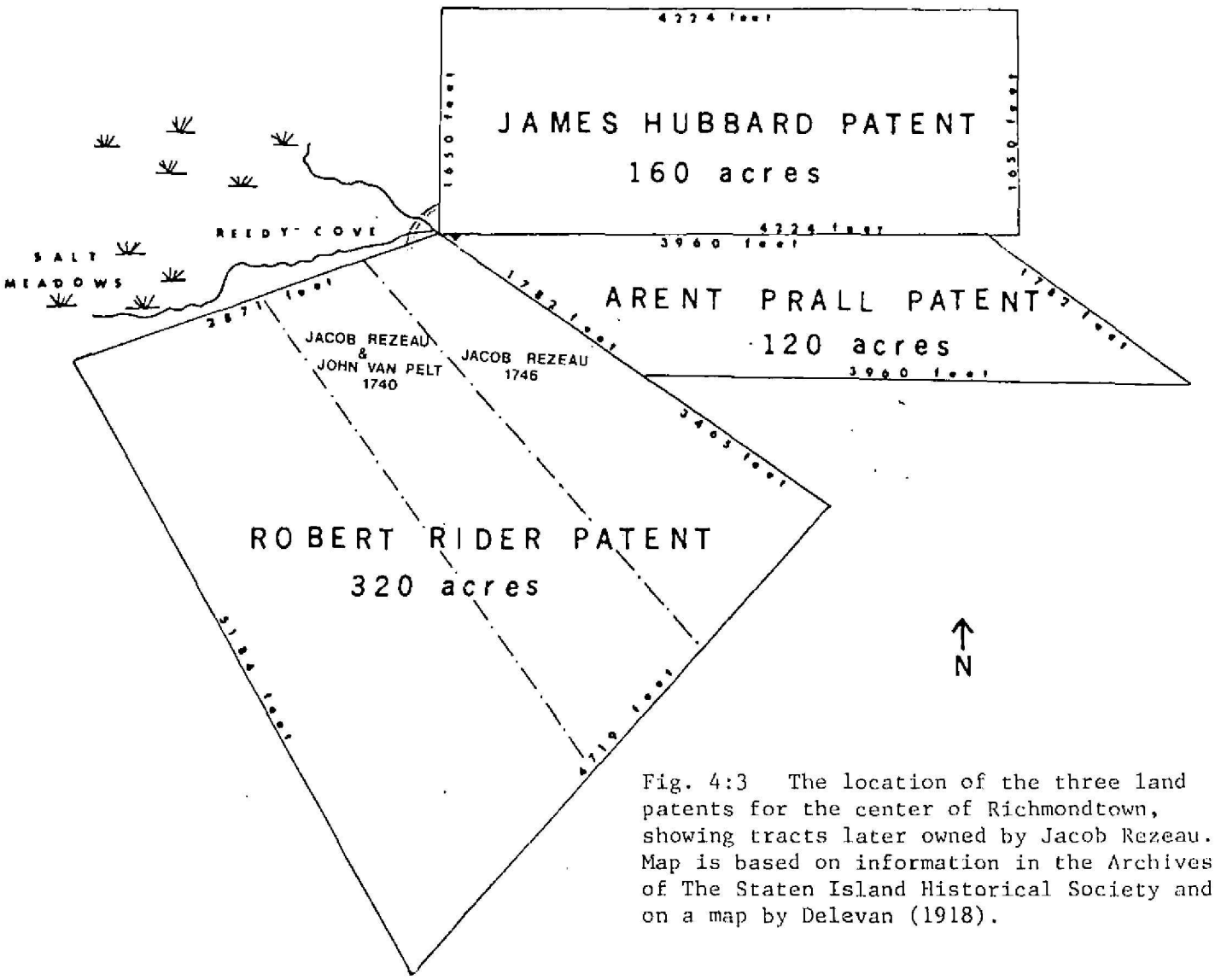


Fig. 4:3 The location of the three land patents for the center of Richmondtown, showing tracts later owned by Jacob Rezeau. Map is based on information in the Archives of The Staten Island Historical Society and on a map by Delevan (1918).

pounds sterling to James Hance Dye, yeoman (Liber B of Deeds, p. 260). On July 5, 1696, less than two weeks after purchasing this property, James Hance Dye mortgaged it. Dye went back to Vincent Fountain to obtain a mortgage for 32 pounds, 10 shillings, even though he had purchased the land for 44 pounds (Liber B of Mortgages, p. 250). Dye had numerous financial difficulties and, over the years, had to sell or mortgage parts of his property.

On July 17, 1696, fifteen days after mortgaging his property to Vincent Fountain, Dye sold the northern 80 acres (of the 160) to James Fitchett (Liber B of Deeds, p. 262). James and Sara Fitchett (Fitceth) kept the property for fourteen months and then they mortgaged the property for 23 pounds sterling, 13 shillings to Hanse Laurence Dye in 1697 (Liber B of Mortgages, p. 259).

On January 13, 1698, James and Sara Fitchett (Fitceth) sold their 80 acres to Thomas Coone for fifty pounds sterling(Liber B of Deeds, p. 319). The Fitchetts still owed over twenty-five pounds to Hanse Laurence Dye; they repaid their mortgage to Dye on January 14, 1699. Regarding the dates, it must be noted that the English recorded January-March dates as a double date (for example, 1698/1699) since their calendar year ended in March, not January. Therefore, it seems possible that the dates of these two financial transactions are 1698/1699, and that the mortgage was satisfied on January 14, 1698/1699, one day (not one year) after the land sale. This sale from Fitchett to Coone represents a major increase in the value of the 80 acres; the sale price is almost double the mortgage value.

In May, 1702, Coone's 80 acres were sold, not by Coone but by Hanse and Sara Lawrence (Dye), to William Die (Liber B of Deeds, p. 522). There is no extant document of the sale of this property from Coone to Hans (Dye) Lawrence. In this 1702 deed, it specifies that the sale is of 80 acres, less one acre to Louis De Boys (Du Bois). A deed dated February 29, 1700 between Dye and Coone for one acre within the 80 acre parcel (Liber B of Deeds, p. 388) seems to indicate that Coone sold the 80 acres to Dye shortly before this time, after which Dye resold him the one acre. On March 6, 1701 Coone sold this one acre lot to Louis Du Bois (Liber B of Deeds, p. 390). The one acre lot is near the intersection of Arthur Kill Road and Center Street (see Figure 4:4). In the eighteenth century a building on this one acre plot became known as the Du Bois Tavern (Delevan 1916: 136).

Since the 1930s, the Staten Island Historical Society has been very interested in the 80 acre northern portion of the originial Rider patent. A seventeenth century Dutch schoolhouse, the Voorlezer's House, was built on land that was owned by Fitchett and Dye. On March 6, 1697 (deed recorded on August 3, 1699) James Fitchett and James Hanse Dye leased (for 50 years) 271 feet of land to the Dutch Congregation (Liber B of Deeds, p. 340). The lease stipulated that the land could be inhabited only by a person serving the congregation.

In the Fitchett deed of July 1696, there is the first reference to a structure that may be the Voorlezer House — below the "foreloeor ore" (Liber B of Deeds, p. 262). This spelling is open to interpretation because the letters are only one-eighth of an inch high in the original document. No word in the extensive two-volume Cassell's Dutch Dictionary (1981) resembles "foreloeor ore." Dr. Charles Theodor Gehring, a linguist with an expertise in seventeenth century Dutch, is currently translating the Dutch records of Nieuw Amsterdam for the New York State Library and Archives. Dr. Gehring would be the most logical expert to consult if further research is required regarding this deed. If the "foreloeor ore" is a misspelling of the word "voorlezer", then it is possible that the Voorlezer House was built prior to July 1696 and the 1697 deed formalized an informal arrangement, but the 1697 lease does not mention a house on the property. A house is mentioned in the deed of 1700/01 when the property was sold. Barent Tyse and Teunis Egbertse with consent of the Dutch Congregation sold to Louis Du Bois "one house att the head of the Fresh Kills, and the plancks there unto belonging which formerly was built for the Dutch Congregation" (Liber B of Deeds, p. 390). Du Bois in 1702 (as was already mentioned) acquired an adjoining one acre parcel of land that runs the length of Center Street (see Figure 4:4); this land remained separate from the 79 acres that were later sold to Rene Rezeau in 1705.

In February, 1702/03, within nine months of acquiring the 79 acres of land, William Hance (Die) sold this land to John Andrenvat (Liber B of Deeds, p. 435). This deed notes that the property contains 88 acres (not 80), less one acre for De Boys (Du Bois); this is probably a recording error since subsequent records describe the parcel as "80 acres less one acre for De Boys". Both the May, 1702 deed and the February, 1702/03 deed note that there are "houses" (and other structures) on this parcel of land; the exact location of these buildings is not given.

In November, 1705, the Androvats (Andrenvats) sold the land (79 acres less one acre for Du Bois) to Rene Rezeau for one hundred and forty six pounds sterling (Liber B of Deeds, p.523). With this sale, the land speculation on this parcel ends; the land remained in the ownership of the Rezeaus and their descendants for the next one hundred and sixty-seven years. In 1872, a Rezeau descendant, Harriet Wheatley, sold the last of the family land to a non-relative. The land-use from 1872 to the present will be discussed later in the chapter.

In the eighteenth century the Voorlezer House was occasionly cited in deeds as a boundary marker for the flat rock ("below the Voorlezer's House"). By the nineteenth century, it is not mentioned in the deeds. Early twentieth century historians, when writing about the Voorlezer House, did not attribute any extant building as being the original Voorlezer House (Delevan 1916; Leng and Davis 1930; Vosburgh 1923). In

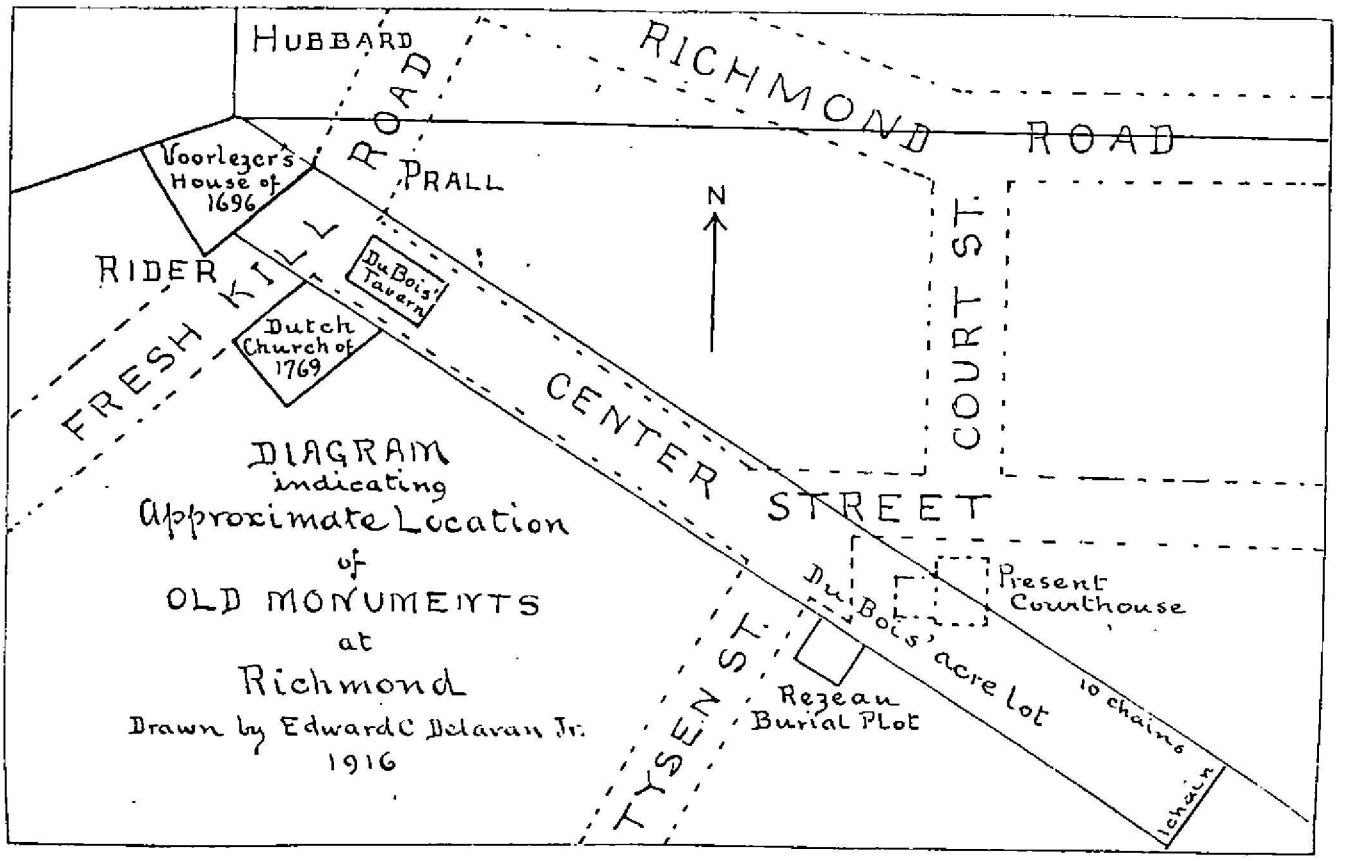


Fig. 4:4 Map showing the location of the Voorlezer House and the DuBois one-acre lot. Map is from an article by Delevan (1918).

fact, Delevan (1916) undertook extensive research on the deeds and the chain of title to properties in Richmondtown and he located what he believed to be the site of the original Voorlezer's House. Delevan did not associate any standing structure with the site of the Dutch schoolhouse. To briefly review the issue, in the 1930s Loring Mc Millen (1937) and Leffert M.A. Haughwout (1937) firmly believed that the house at # 63 Arthur Kill Road (the Rezeau family house) was the original Voorlezer House. They prepared papers to present their evidence to the Staten Island Historical Society. The result of their efforts was that this historic house was saved from demolition and was restored as the Voorlezer House. The Staten Island Historical Society has continued to research the history of the Voorlezer House; numerous articles have appeared in the Staten Island Historian including a new volume to be released in winter 1985/86.

The Rezeau Family Ownership Of the Site

The history of Rene Rezeau can be traced to the Isle de Re off the coast of France. Hugeunot Rene Rezeau and his wife, Anne Courier, like many other Huguenots, traveled to the Isle of Re from neighboring provinces in their efforts to flee France and to emigrate to America. Rene and Anne Rezeau left the Isle of Re in 1685, "sojourned in Carolina" and settled in New York City (Hill 1975: 73). Rezeau was living in New York City by 1689 because there is a record of the baptism of his daughter Ester in the French Church in New York in January 1689 (Baird 1885, Vol.I: 305).

For a French Huguenot, New York City was an ideal place to relocate. Under Dutch rule, the city of Nieuw Amsterdam accepted people of all nationalities and religions. With the English take-over of the colony in 1664, the policy of religious tolerance continued.

In the 1660's when Staten Island land patents were being granted by the English Governor of New York, people of diverse religious and ethnic backgrounds received land. In 1705, when Rene was ready to purchase a tract of land, Staten Island was a good choice. In 1700 the French were the most influential ethnic group on Staten Island (Leng and Davis 1930, Vol. I:152). When Rene Rezeau bought property in Richmondtown there were four other French families living in the hamlet (Delevan 1916: 136).

In 1705, Rene Rezeau purchased 79 acres of land plus 9 1/2 acres of salt meadow; the property contained "houses" and other structures but the exact location of these buildings is not given (Liber B of Deeds, p.523). In the 1706 Census Peter Rezeau (aged 30) and John Rezeau (aged 20) are listed but there is no record of a Rene Rezeau in this census (Leng and Davis 1930, Vol. 2: 943). Perhaps he sent his two sons to prepare the site and buildings and the farm before the rest of

the family settled on the island. Since the Rezeaus did not own other property on Staten Island, it can be assumed that they settled on this land. In 1706 (perhaps after the Census had taken place) Rene Rezeau, by Act of Assembly, gave up a small portion of his land for the site of a new jailhouse. The building was erected at "the head of the Fresh Kill upon the land of Mr. Rezeau and Lues Deboys" (Stillwell 1903, Vol. 1: 42). The foundation of this jail still is visible; it is located on land bounded by Arthur Kill Road on the west and Center Street on the south (see Figure 4:5). The building is near the present location of the Voorlezer's House.

No extant document refers to the "Rezeau house", so the location and size of the house is not known. It is possible that on his newly purchased property, Rene Rezeau adapted and modified one of the extant buildings for use as his family dwelling. We can speculate on the size and shape of this building. Architectural historian Fiske Kimball (1966:63) states that while masonry was used on some 18th century houses, wood was the material used for the average colonial dwelling. Loring McMillen (1941: 25) states that the average house on Staten Island prior to 1730 was a one room, one story building often built with an "L" kitchen addition and a garret for use as a storage area or as sleeping quarters for children. Rezeau was a mason and a farmer and since he did have access to 146 pounds sterling to purchase this land, he certainly was not poor. However,there is no record to indicate that he was affluent. In the documentary records Rene Rezeau was never referred to as a prominent man.

Rene Rezeau died in 1720 (Abstracts of Wills, Vol.2: 274). He was probably in his late 60's or early 70's when he died. He was survived by three sons and five daughters and one granddaughter. Peter Rezeau inherited his father's property in Richmondtown. Peter was a mason and farmer, like his father. Historians Leng and Davis (1930, Vol. 2: 943) state that Peter Rezeau "was a justice in 1713, refused to pay debts of his wife Dorcas in 1719, but nevertheless made her one of his executors in 1729". Peter survived his father by only three years; Peter willed the land to his three sons, Peter Jr., Jacob, and James (Abstracts of Wills, Vol.2: 274).

Ten years later (1733) Peter Jr. died; he left his share of the Rezeau land to be divided between his two brothers, Jacob and James (Abstracts of Wills, Vol.3: 130). Were both brothers living on the property? Jacob Rezeau and his wife Susannah had already started their family (Davis 1889: 30). Unfortunately, there is no document that clarifies who was living on the Voorlezer House site. In 1746, James sold his interest in the property to his brother Jacob (unrecorded deed on file in the Archives of the Staten Island Historical Society). Archaeologically there is evidence that someone was living on the site in the 1740s; perhaps this is material discarded by Jacob Rezeau and his family.

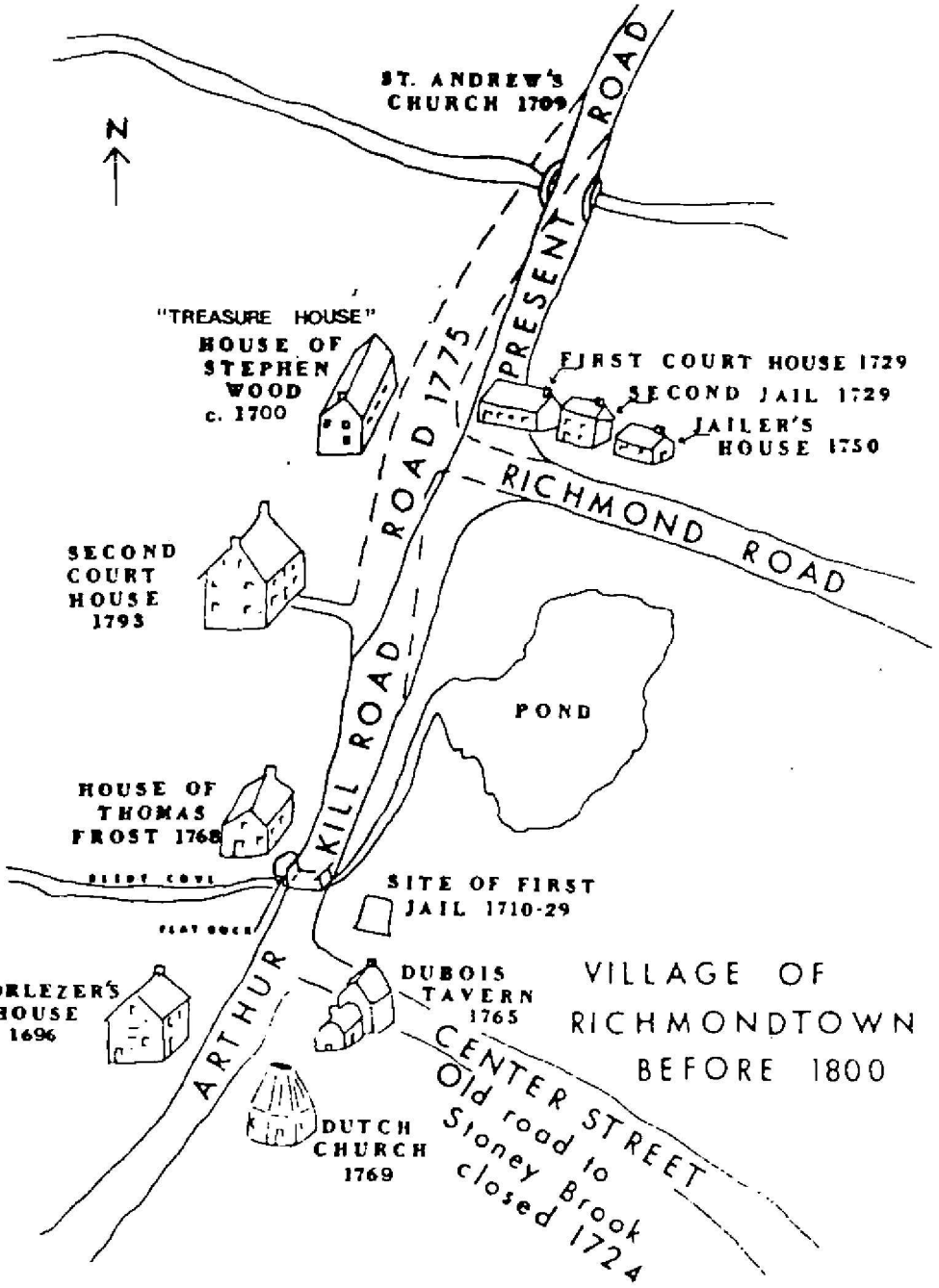


Fig. 4:5 The location of the Voorlezer House within the Colonial Village of Richmondtown (adapted from a map in an article by R. Safford, 1940:27).

In 1740 Jacob Rezeau with John Van Pelt purchased 80 acres of land that were parallel to the 79 acres of land that were owned by Jacob and James Rezeau (Liber D of Deeds, p. 234). This prime land (the two parallel properties) was on the southern border of the Village of Richmondtown (see Figures 4:3 and 4:5). In the 18th century, Richmondtown was an expanding nucleated village with homes in the center of the village and farmland surrounding it. Richmondtown, with its location at the center of Staten Island and linked to other areas by roads, was a natural choice for the County Seat in 1729. For the three generations of Rezeau men who were craftsmen and farmers, the proxmity of their homes at the edge of the Village may have provided some economic benefits.

By the time of his death, Jacob Rezeau owned the complete 80 acres that he had co-owned with John Van Pelt in addition to his original 79 acres. Jacob Rezeau had four children (Jacob Jr., Peter (III), Wyntje, and Susannah) and he gave portions of his estate to each of his children and grandchildren. During the Revolutionary War years, Jacob's daughter, Wyntje and her husband Richard Johnson were probably living on the Voorlezer House site. In 1762 Wyntje married Richard Johnson (N.Y. Marriages, p.206). When Jacob Rezeau drew his will in 1786, Wyntje and Richard Johnson were living in Rezeau's home on the Voorlezer House site. The will does not indicate that Jacob was living with them. In fact, Jacob may have built another home for himself. Jacob Rezeau gave the 48 acres of land, including the plot containing the Voorlezer House site, to Wyntje and Richard Johnson; the remaining portion of the 79 acre plot was given to his other daughter Susannah Winant and other property was willed to his sons and their heirs (Will of Jacob Rezeau File P10).

Wyntje Rezeau Johnson died in 1788 at the age of 43 and she was buried in the Rezeau family burial grounds (Davis 1889: 30). When Jacob Rezeau died in 1789, Richard Johnson was living in the house with his two children, Susannah and Rezeau. A third child, Richard, died at age 14 and was buried near his mother (Davis 1889: 30). The year 1789 marked the passing of the last Rezeau male to own this property; the land then passed to the female members of the Rezeau family. Because the Rezeaus owned this land for more than 80 years, it is appropriate to pause here and look at the adaptation of this family to life in the colony of New York.

The Rezeaus were a family of French origin who lived in a British Colony. However, colonial Staten Island had a large number of Dutch and French settlers, in addition to the English colonists. Did the Rezeau family try to assimilate or did they, with their French friends and neighbors, maintain their ethnic identity? The historical evidence indicates that over three generations this family assimilated, to some extent, into the larger colonial society while still not becoming totally Anglized.

In 1730 there were approximately a dozen homes in the village of Richmondtown (Board of Education of the City of New York 1964: 28). In 1700, the small hamlet of Richmondtown had four French families which comprised at least 1/3 and perhaps as much as 1/2 of the population of the hamlet at that time; and the French had their own church. Rene Rezeau moved his family into this French enclave. However, by 1717, the French had given up their own church and were worshiping with the Dutch (Vosburgh 1923:28). This religious union was not as dramatic as it seems since the Huguenots and the Dutch Reformed sects are both Calvinists. However, this union may have been an economic action. Vosburgh (1923:31) states that on Staten Island "from 1737 on, the French congregation had so disintegrated that they were unable to support their pastor". Historians Leng and Davis (1930, Vol. I: 152) note that on Staten Island it was not until 1739 that "the French were becoming less influential, and the Dutch a little more prominent than the English."

In reviewing the history of the Rezeau family there seem to have been some steps taken by various family members to assimilate into colonial society. In the documents, Rene Rezeau's children all have Anglicized names: Peter (rather than Pierre), John (rather than Jean), etc. However, Rezeau's daughters married men with French surnames. Rene's son Peter became a local justice in 1719. It was Rene's grandson, Jacob, who made the most steps toward assimliating. By 1746 Jacob Rezeau owned prime land bordering the Village of Richmondtown, the county seat. Rezeau was a cooper and farmer and was involved in local politics. In 1756 he was named an assistant justice (Leng and Davis, vol I: 162). In the records of Westfield (Town Book of Westfield, 1757-1819, on file in the Archives of the Staten Island Historical Society), he is listed as holding the following positions:

1760 Pond Commissioner
1761 Pond Commissioner
1762 Damage Appraiser (horses and cattle)
1763 Damage Appraiser (horses and cattle)
1764 Commissioner and Surveyor of Highways
1764 Damage Appraiser
1768 To take Inventories of Interested Estates
1769 Commissioner and Surveyor of Highways

Jacob Rezeau was actively involved in his community.

Not all of Jacob Rezeau's actions were assimilative. He gave one of his daughters a very distinctive and traditional Dutch name, Wynjte (Pirsson 1889). In terms of religion, he was involved in a Calvinist church, not in an Anglican church (the Church of England). In 1769 Jacob Rezeau, Elder of the Presbyterian Church, donated a small lot of land (65' x 55') to the Reformed Church. This plot was only one and a half blocks away from Saint Andrews, the Anglican church. Vosburgh (1923: 33) notes that the Presbyterian and the Dutch Reformed churches agreed to unite congregations and to worship together in the new church on the land donated by Jacob Rezeau. This church was destroyed by the British army during the Revolutionary War (Vosburg 1923: 34). By the

time of the Revolutionary War, Jacob Rezeau had gained recognition for himself and for his family. He was a successful farmer and cooper; he was actively involved in local government; and yet he had not become totally Anglized.

Jacob Rezeau's daughter, Wyntje, married a person of English ancestry, Richard Johnson. They had three children: Richard Jr., Suzannah, and Rezeau Johnson. Susannah, like her mother Wyntje, married a non-Frenchman; she married John Van Pelt by 1792 and their first child, Catherine, was baptised in the Reformed Dutch Church at Port Richmond (Vosburgh 1923, Vol. 2:4). John was a descendant of a Dutch family (Jan Theunisseur Van Pelt) which settled on Staten Island in 1680 (Leng and Davis 1930, Vol. II: 969). In 1740 Jacob Rezeau had purchased land with another John Van Pelt, reinforcing the tie between these two families that continued for three generations. In May 1793, Rezeau Johnson and his sister, Susannah Van Pelt, jointly received the deed for the 48 acres of land willed to their mother, Wyntje Johnson (Liber 378 of Deeds p. 336). Two months later, Rezeau Johnson mortgaged his property to John Van Pelt for 92 pounds (Liber B of Mortgages, p. 417). This mortgage probably was never satisfied, because this land remained in the hands of the Van Pelt family.

The Census Records of 1800 and 1815 indicated that Richard Johnson, Susannah's father, was living with them. Richard Johnson died in 1815 at age 79 (Davis 1889: 30). The Census records list John Van Pelt as a cooper and farmer. John and Susannah Van Pelt were not poor. In the road assessment taxes of 1817-1820, John Van Pelt was taxed for three days work, while the average Richmondtown male was taxed between one and two days; this assessment may have been based, however, on acreage size rather than assessed property value.

In the early nineteenth century, as Richmondtown continued to increase in population, the individual land holdings decreased in size. People such as Henry Seaman and James Guyon, who were evidently land speculators, purchased large tracts of land and divided these parcels into plots that contained less than an acre of land. These small lots were used either for private residences or for small businesses, e.g., craft shops, country stores, inns, etc. The Voorlezer House site was used differently than the other parcels of town land. The Rezeau property was located at the southwestern edge of the village and during this time it continued to be used as a family residence and farm.

In 1826, John Van Pelt died at the age of 66 (Davis 1889: 30). John's wife and son remained in the family's house. John's son, Cavalier Van Pelt, farmed the family land until his death in 1855. Cavalier lived as a bachelor with his widowed mother. In 1818, Cavalier's sister, Catherine Wheatley, died at age 25 (Davis 1889:30). Catherine was survived by her husband, Henry Wheatley, and her one year old daughter, Harriet. In 1826, shortly after the death of John Van Pelt, Henry Wheatley died. Cavalier became the guardian of Harriet Wheatley, his nine-year-old niece, in 1826 (Wheatley, Letters of

Administration on file at the Staten Island Historical Society). Harriet, like her uncle Cavalier, never married.

In the road assessment taxes of 1839 and 1845, Cavalier Van Pelt, like his father, John, had to pay a higher assessment than many of his neighbors in Richmondtown. In fact, in 1839, his tax was higher than that of 78% of his neighbors and in 1845, it was higher than the tax paid by 84% of his neighbors. In the property and personal tax assessments for Staten Island in 1840, 1842, 1844, and 1845, Cavalier was listed as owning 50 acres of land valued at $900.00. His land was assessed at about the same value per acre as the land of the neighboring farmers.

Cavalier, unlike his ancestors, did not list his occupation as a craftsman; he was a full-time farmer. In the nineteenth century, Richmondtown, as the county seat, was the political center of Staten Island (see Figure 4:6). Leng and Davis (1930, Vol. I: Ch. 6) note that in the first half of the nineteenth century, Staten Island's urban and commercial growth occurred on the north shore; not in the central southern portion of the island where Richmondtown is located. In fact, Leng and Davis (1930, Vol. I: 230) note that "Staten Island still remained principally a rural community for thirty years after the War of 1812." Cavalier did fit into the general occupation pattern for south and west shore residents of Staten Island, who were mainly farmers.

In 1855, Cavalier Van Pelt died at age 58; he left his property to his mother, Susannah Van Pelt and his niece, Harriet (C. Van Pelt Letters of Administration, File A-703). In the Census of 1855, Susannah (age 91) and Harriet (age 36) remained on the family farm. Living with them was a "domestic," Martha Depuy. When Susannah died in 1863, just short of the age of one hundred, Harriet inherited the farm (S. Van Pelt Letters of Administration File A-1210). In 1872, Harriet Wheatley sold the Rezeau family home to a non-relative, Martin Mooney (Liber 99 of Deeds, p. 309). With this sale, a one hundred and sixty-seven year history of land ownership by a single family came to an end.

The Ownership of the Property After 1872

By the second half of the nineteenth century, Richmondtown's prosperity started to decline. Business and commerce were shifting to the north and east shores of Staten Island where factories and new roads were being built (The Board of Education of New York City, 1964: ch. 5). In 1898, Staten Island became one of the Boroughs of New York City and the county seat was moved to Saint George, a town on the north shore (The Board of Education of New York City, 1964: 147-149).

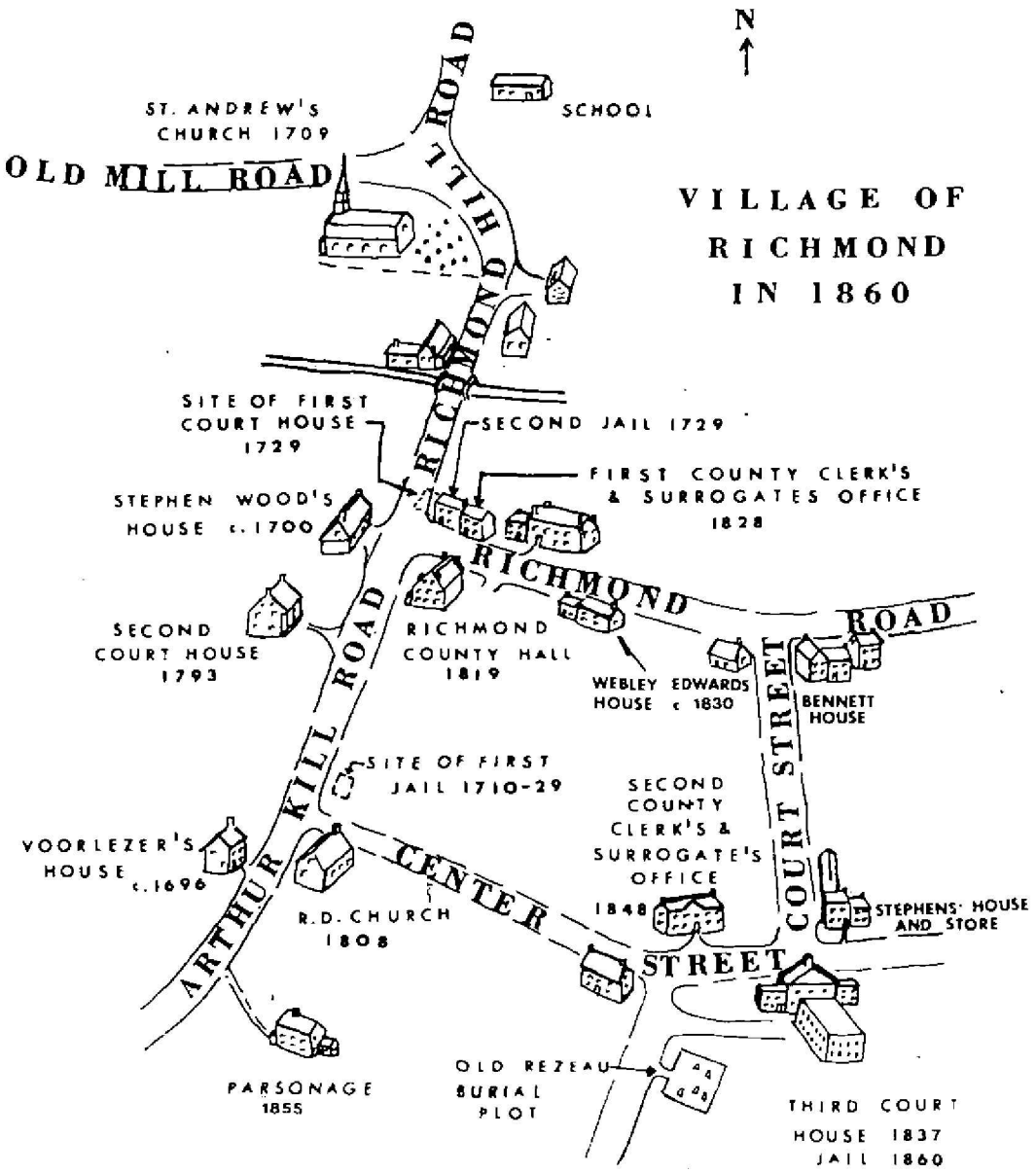


Fig. 4:6 The location of the Voorlezer House within the Victorian Village of Richmondtown (adapted from a map in Staten Island, 1524-1898 by Henry Steinmeyer).

Richmondtown's political importance declined after the county seat moved. As business drifted away from Richmondtown in the twentieth century, the village became primarily a residential area.

Martin Mooney, the 1872 purchaser of the house, entered into the changing economic fabric of post-Civil War Richmondtown. Mooney, a farm laborer, born in Ireland, lived in the Rezeau/ Van Pelt house with his wife, Catherine, and their six children (Census 1875 and 1880). After owning the Van Pelt property for eleven years, the Mooneys gave up the farm. In 1883, the Mooneys sold the property to Solomon Rosenberg, a dry goods merchant (Liber 150 of Deeds, p. 510). The Rosenbergs enlarged the house by adding a separate wing to the north facade in which they operated a dry goods store and then a hotel-saloon (City Directories 1911, 1914). The hotel-saloon was sold by the Rosenbergs to Sam Cohen in June 1924. In September 1924, Sam Cohen sold the property to Marie Peterson (Liber 783 of Deeds, p. 225). Marie Peterson had serious financial problems (perhaps because of the Depression) and defaulted in her mortgage payments. The Richmond County Federal Savings and Loan foreclosed and became owner of the property in 1936 (Liber of Deeds p. 225).

In the 1930s, the City of New York planned to widen Arthur Kill Road. Houses on the western side of Arthur Kill Road would have to be either moved or demolished. During this time, Loring McMillen and Leffert Haughwout made a passionate case to the Historical Society to save this historic home. After various negotiations Marie Alice Kennedy, a member of the Staten Island Historical Society, bought the parcel from the bank on January 17, 1939 (Liber 812 of Deeds, p. 587) and two days later, sold the property for one dollar to the Staten Island Historical Society (Liber 812 of Deeds, p. 592). The Staten Island Historical Society moved the house in order to save it. The house and land remained in the hands of the Historical Society, and in 1958, the property was transferred to the City of New York, as part of the Contract between the Staten Island Historical Society and the City of New York which offically established Richmondtown Restoration.

Chapter 5: Archaeological Analysis of the Voorlezer House Site

The aim of this chapter is to analyze the archaeological data in tandem with the documentary material in order to present information about the lifestyles of the occupants of the Voorlezer House site. The previous chapter discussed the history of the site and its owners. This chapter will present what the archaeological record reveals about them.

Nine research questions are addressed in this chapter. Chronologically they are as follows:

1. What does the archaeological record reveal about eighteenth century trade networks on Staten Island?

2. How do the eighteenth century Voorlezer House site ceramics artifacts broadly compare with the ceramics artifacts found at two other sites (the Conference House and the Perine House) on Staten Island?

3. Can the eighteenth century ceramics at the Voorlezer House site accurately reveal the owners' (the Rèzeau and Johnson families) socio-economic status?

4. Can ethnic patterns be determined by analyzing the eighteenth century artifacts?

5. Is there a difference in the artifact assemblage of the Rezeau/Johnson family with their nineteenth century descendants, the Van Pelt family?

6. Are there indications of the change in the use of the site from a private residence to a dual commercial and residential use?

7. What does the data reveal about nineteenth century trade networks on Staten Island?

8. What is the difference in the garbage disposal patterns at the Voorlezer House site in the twentieth century versus the patterns in the nineteenth century?

9. What does the data reveal about the dietary patterns of the people who lived at the Voorlezer house site?

In addition to these research questions, we have noted the unusual or exhibitable finds at this site.

Eighteenth Century Trade Networks

Our first research question was: what do the Voorlezer House artifacts reveal about eighteenth century trade networks? Baugher and Venables (1985a, 1985b) addressed this question as part of larger research projects on trade networks in colonial New York and ceramics as indicators of status in colonial New York. The data presented here is taken from an article by Baugher and Venables (1985a). In order to answer this question, we compared and contrasted the Voorlezer House artifacts with artifacts from archaeological sites in Manhattan.

The three Manhattan excavations considered in this paper were directed by Bertram Herbert and Terry Klein (the Barclay Bank site); by Nan Rothschild and Arnold Pickman (7 Hanover Square site); and by Nan Rothschild and Dianna Rockman (the Stadt Huys Site). They were conducted as public archaeology projects monitored by the New York City Landmarks Preservation Commission. Site reports have not been completed on these three sites, although research and report preparation is underway.

The three Manhattan sites are located in lower Manhattan, the location of the colonial city. The artifacts unearthed came from colonial backyards and basements which were buried underneath buildings from the nineteenth and twentieth centuries. On all three sites, many of the eighteenth century structures were destroyed by an 1835 fire. The later nineteenth century buildings covered, and thus protected, the eighteenth century building foundations, backyards, and their associated artifacts. These three sites had been parking lots immediately prior to the archaeological excavation, but now skyscrapers are rising upon them. The Manhattan sites are:

-- Barclay Bank, at the intersection of Wall and Water Streets

— 7 Hanover Square, at the intersection of Pearl Street and Hanover Square

— Stadt Huys, at the intersection of Pearl and Broad

We compared the ceramic assemblages from these Manhattan sites with the ceramic assemblage from the Voorlezer House site (see Figure 5:1).

The Manhattan data was used to illustrate the presence or absence of material in the Port of New York. None of the Manhattan sites contained ceramic assemblages that could be linked to a specific family. The three Manhattan sites had various problems: a) the time range for the levels was broad, or b) they lacked supportive docu-

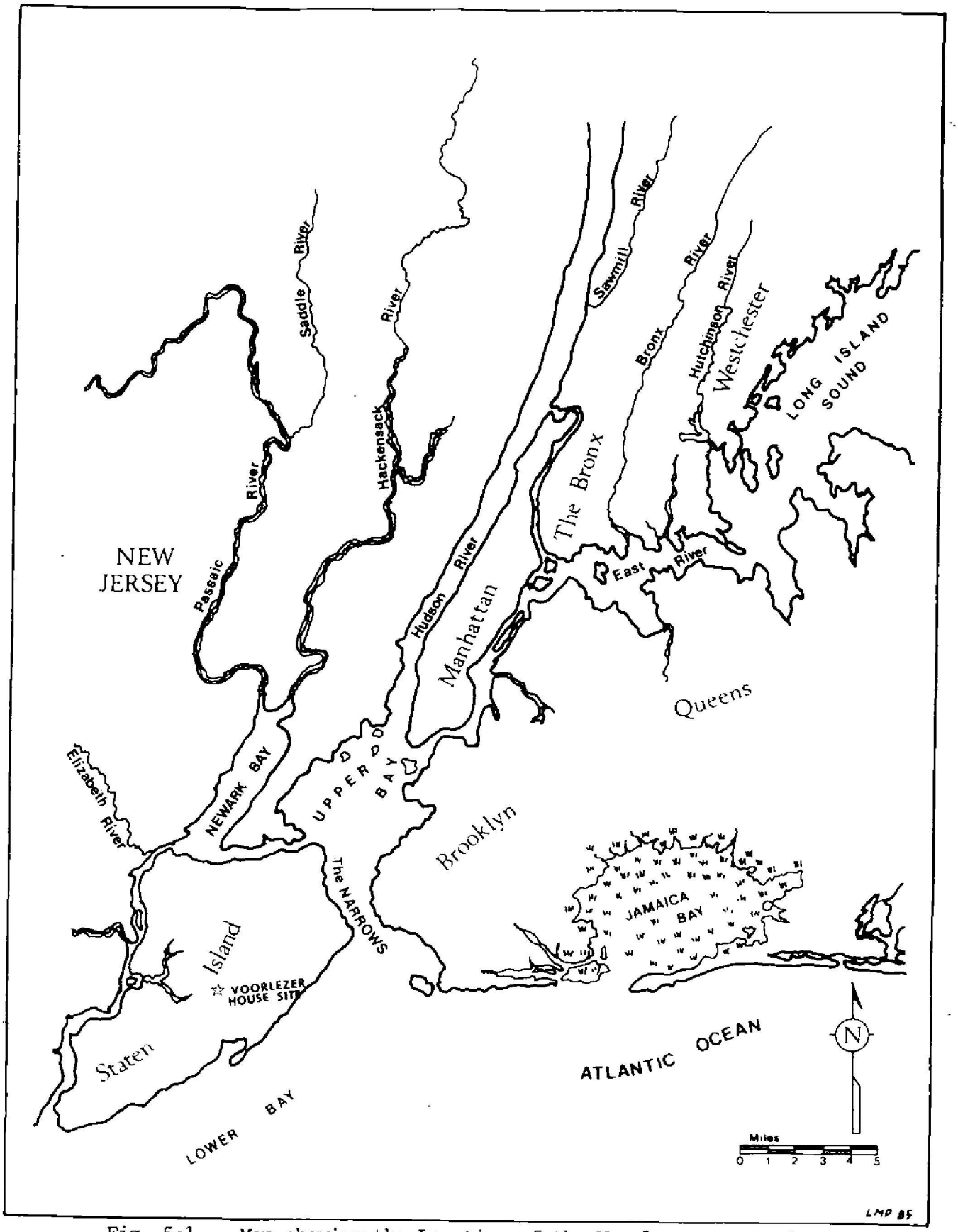


Fig. 5:1 Map showing the Location of the Voorlezer House Site in relation to the colonial port of N.Y. Map adapted from "New York [City] 1776" in James Adams' Atlas of American History. Map drafted by Louise DeCesare.

mentary evidence, or c) there were too many varied uses of a property to link the archaeological data to a particular occupant. Thus the Manhattan sites only revealed generalized and broad chronological sweeps for the eighteenth century rather than era-specific quantitative conclusions linked to specific families. It must be noted that of the ten Manhattan excavations that have been completed, no artifact assemblages have been linked to specific families who lived in the mid to late eighteenth century.

The Manhattan archaeological data was used in tandem with historical data : the records of an eighteenth century colonial merchant, Frederick Rhinelander, who specialized in ceramics. The New York Historical Society contains the papers(twenty-five volumes) of Frederick Rhinelander, proprietor of a china, glass, and earthenware store in Manhattan from 1770 to 1786. Ceramic historian Arlene Palmer Schwind's (1984) lengthly article detailed all of the ceramic types (and their prices) that were imported by Rhinelander. Thus we were able to document the range of goods available in the colonial capital of New York. The archaeological data was compared with documentary evidence listing the exact types of wares that were being imported into the Port of New York during the 1770s and 1780s.

Schwind (1984) notes that, in the 1770s and 1780s, the fashionable wares were Chinese porcelain, creamware, pearlware, white salt-glazed stoneware, and some decorated delft. Delft and white salt glazed stoneware were at the height of fashion in mid-eighteenth century; the Rhinelander papers demonstrate that this style of wares continued to be popular into the late eighteenth century (Schwind 1984: 26-27). One of the lower status wares was Nottinghamware. The documentary records show that within each ware type there is a diversity in vessel shape, design, and price. For example, enameled white salt-glazed stoneware cups and saucers were four times more expensive than the undecorated white salt glazed cups (Schwind 1984: 26).

As stated earlier, no site reports exist for the three Manhattan sites. This study, though, incorporates the findings from the very thorough research undertaken by archaeologist Meta Janowitz of the ceramic assemblages from all three sites. After the Voorlezer House artifacts had already been studied by Baugher and Baragli, Janowitz was asked to review the ceramic assemblage and to note the similarities and differences between the Voorlezer House artifacts and Manhattan ceramic assemblages. Janowitz confirmed that the imported wares on Staten Island were similar to those unearthed in Manhattan. Thus Staten Island was not an isolated peripheral area in terms of trade and it had access, just as did Manhattan, to British goods. After all, the merchants were able to get the goods 3,000 miles across the Atlantic, getting them across the Upper Bay was simple (for more details on the marketing of goods to eighteenth century Staten Island families see the article by Robert W. Venables, 1985). For example, the Staten Island and Manhattan families were using fine quality white salt-glazed stoneware dishes and Nottingham cups from England. Their porcelain tea sets were imported — via England — from China to both

Mnahattan and Staten Island. Delftware bowls, mugs and dishes -- with both designed and plain motifs -- were being brought from England and distributed both on Manhattan and Staten Island. The Rezeaus were drinking tea and thereby participating in a fashionable English custom that was far from a necessity. As the Revolutionary era dawned, on Staten Island and Manhattan the families who could afford to were also purchasing the fashionable new Wedgewood dishes.

Although the Manhattan and Staten Island ceramic assemblages are similiar in the presence of high status table wares, the sites on Manhattan and Staten differed in their assemblages of inexpensive kitchen wares. Local potters throughout the Northeast produced variety of utilitarian wares from mixing bowls to baking dishes. Meta Janowitz noted that the Staten Island site contained both local redwares and stonewares not found in the Manhattan sites, as well as some wares similar to those from the Manhattan sites. Even though Staten Island had clay deposits that could have been used for redware and stoneware, there are no known eighteenth century potters on Staten Island. New Jersey had abundant clay deposits and the documentary record clearly identifies potters and potteries operating during this period.

A major problem in analyzing local redware and stoneware to discern trade networks is that there is a great stylistic similarity in these wares. Most of the redware and stoneware from this time period did not have designs that could be linked to particular potteries. While the location of specific potteries in Manhattan and throughout New Jersey is known, most of these potteries did not have any distinguishing trademarks or stylistic designs. At present, archaeologists use the phrase "locally manufactured in New York or New Jersey" to cover all of the redwares and stonewares sharing similar designs and styles.

In Fall 1985, Professor Alan Gilbert from Fordam University took clay samples from pottery from archaeological sites on Staten Island. Dr. Gilbert has received a grant to study sources of clay used in colonial New York/New Jersey made pottery. Dr. Gilbert will be taking clay samples from clay pits on Staten Island and in New Jersey, as well as taking samples from pottery from Manhatan and New Jersey archaeological collections. He will be working with Steve Nutt and the curatorial staff of Richmondtown Restoration Center to locate local colonial clay pits. This work should answer some questions about colonial trade in local pottery.

A Comparison of Artifacts of the Rezeaus With Other Local Sites

How similiar is the ceramic assemblage of the Rezeaus compared to other Staten Island families? The archaeology program at the New York City Landmarks Preservation Commission is currently studying the

archaeological collections from the Conference House site and the Perine House site (see Figure 5:2). As part of the research for the exhibit at the Staten Island Museum, "Staten Island Trade Networks: A Study of Community History Through Archaeology" (exhibtion dates March through August 1985), Baugher and Baragli analyzed the ceramic, glass, and smoking pipe assemblages from these three Staten Island sites; this information was incorporated into the colonial section of the exhibit.

The Conference House, located in Tottenville, was owned by Christopher Billopp, one of the most affluent landowners in eighteenth century New York. The original property was settled by Billop's grandfather, Christopher Billopp I. Billopp, the grandson, was a staunch loyalist during the American Revolution. The twentieth century name "Conference House" was given to Bentley Manor (the Billop family's name for their property) to commerorate the famous but unsuccessful peace conference between British and Patriot negotiators, including Lord William Howe and Benjamin Franklin (Davis 1926).

The Perine House property, located in Dongon Hills, was first owned by the Billiou family in the 1660s. In 1749, Joseph Holmes, an innkeeper, purchased the property. The house was used as a residence and as a tavern from 1749 to 1759. In 1759, Joseph Holmes died, and in 1764, his widow turned the property to her son-in-law, Edward Perine. The Perines lived in the house for the rest of the eighteenth century. Edward Perine was a weaver and farmer (Hine 1915).

Even through the three sites represented families of different socio-economic status, there was a marked similiarity in the material culture. All three families owned some high status wares. A good example of the similiarity of the ceramics is in the delftware; at all three sites there were sherds of a purple sponged design with a fish motif (see Figure 5:3). At all three sites there were sherds of Nottinghamware, the same inexpensive English stoneware found at sites in lower Manhattan. At all three sites ceramic assemblages included tea cup and saucers made of white salt-glazed stone ware (see Figure 5:4), and some dish sherds of creamware (both of these wares were expensive eighteenth century tablewares). This data comfirms what was found in the study of Voorlezer House ceramics with those ceramics from the Manhattan -- all three Staten Island families were purchasing the same kinds of status goods that were available to the families in the colonial city of New York (for more details on this study see Baugher and Venables, 1985a).

The Baugher and Baragli study of locally made wares unearthed at the Voorlezer House site, the Conference House site, and the Perine House site confirmed the findings of the study of the Manhattan ceramics and the Voorlezer House ceramics. Some of the locally made wares were the same as those found at the Manhattan sites. while other lower status wares were unique to Staten Island. The redwares and stonewares that were different from the Manhattan sites were sherds

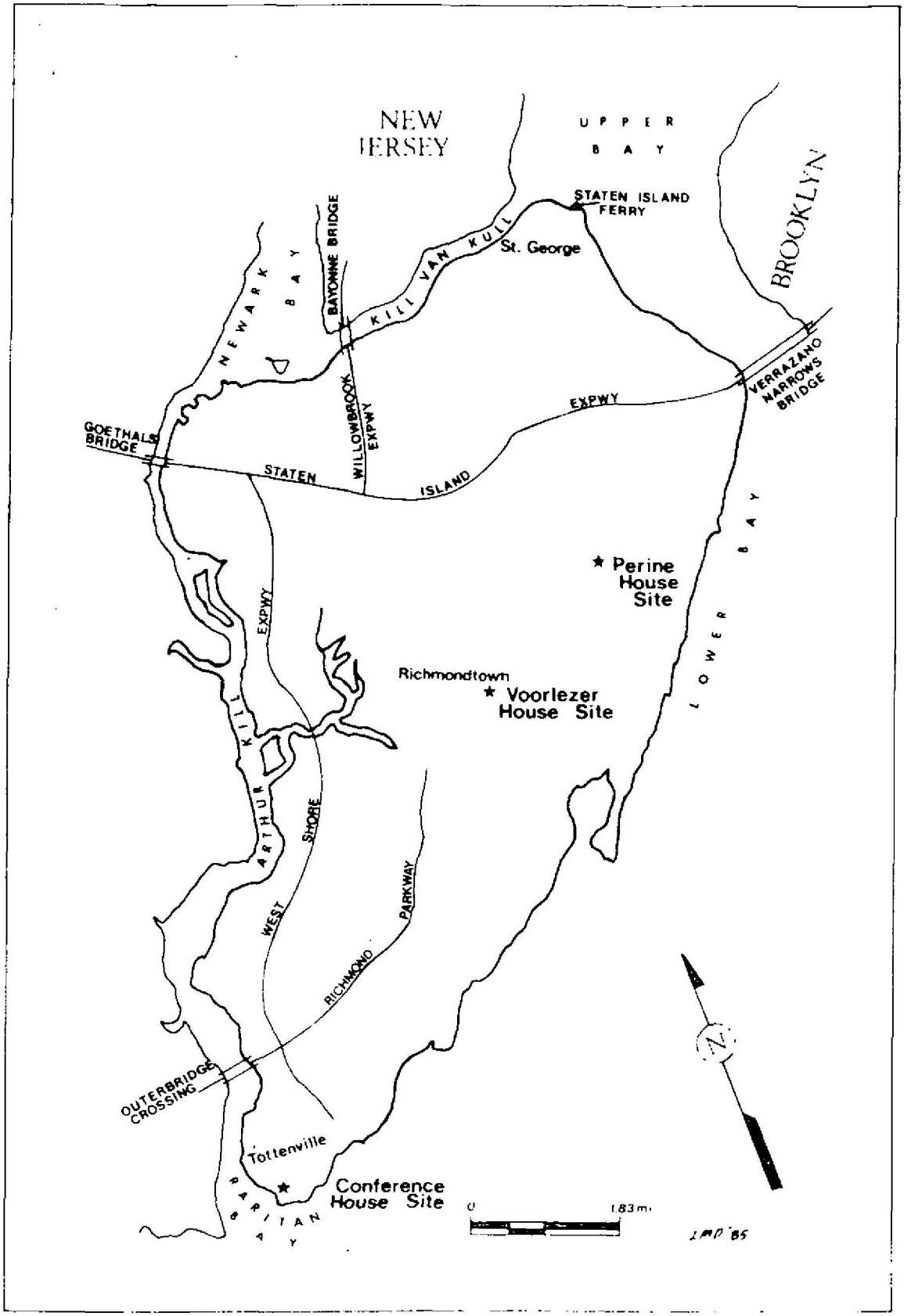


Fig. 5:2 Map showing the location of the Voorlezer House, the Perine House, and the Conference House on Staten Island. Map adapted from a map in a book by the Bd. of Education of the City of N.Y. (1961). Map drafted by Louise DeCesare.

Fig. 5:3 English delftware with purple manganese sponge motif. These artifacts are from: #162-Monmouth County Historical Society, N.J., #163-Perine House Site, #164-Conference House Site, #165-Voorlezer House Site. Photo: Carl Forster.

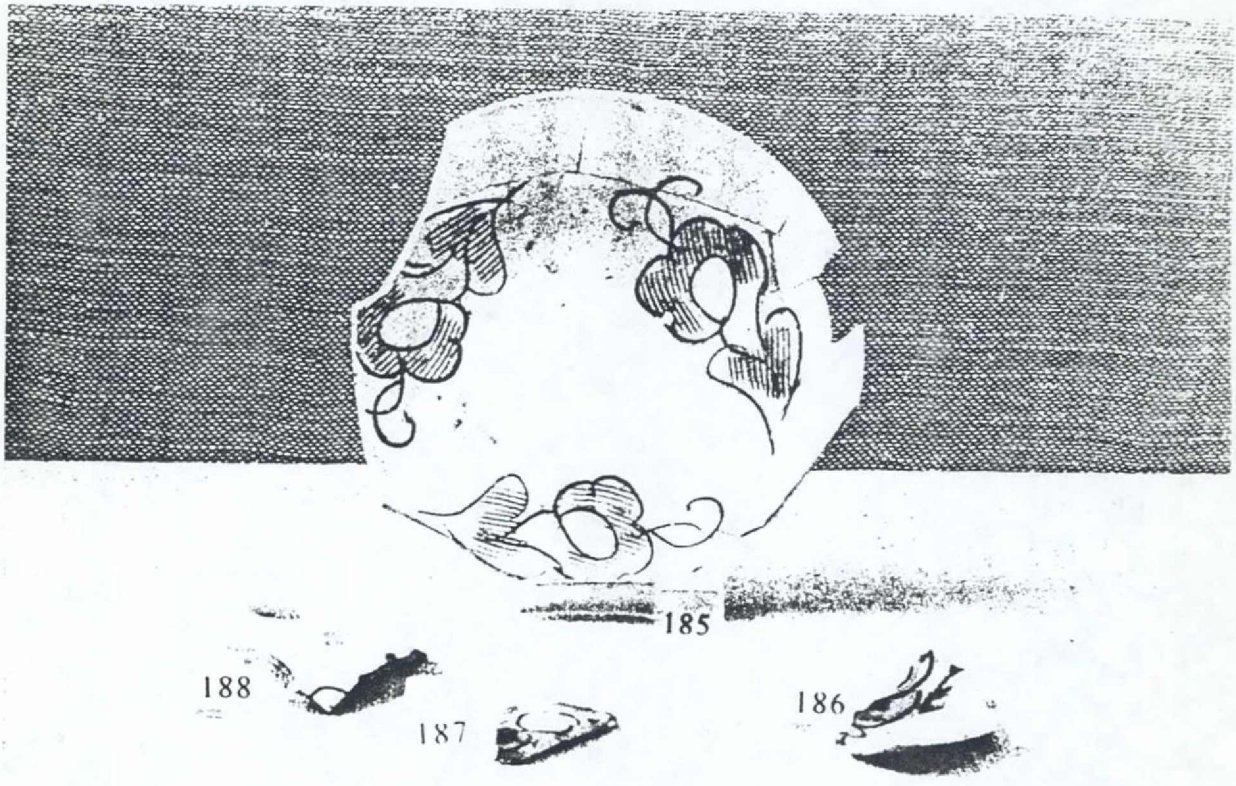


Fig. 5:4 English white salt-glazed stoneware with scratch blue design. These artifacts are from: #185-175 Water Street Site (Manhattan), #186-Van Duyne House Site (Wayne, N.J.), #187-Perine House Site, #188-Voorlezer House Site. Photo: Carl Forster.

that were found at the three Staten Island sites. Meta Janowitz looked at the Conference House and Perine House stonewares and redwares and confirmed Baugher and Baragli's findings. Given the close proxmity between Staten Island and New Jersey and the trade routes connecting these two areas, it seems probable that these "local" redwares and stonewares came from New Jersey.

Ceramics as Indicators of Status in the Eighteenth Century

Archaeologists studying nineteenth century sites believe that ceramics can be used as indicators of status. Ceramic historian and archaeologist, George Miller(1980) has developed methods for determining the purchase price of nineteenth century ceramics. Miller's ceramic indexes have been tested using data from nineteenth century sites. At present, there is no Miller index for eighteenth century ceramics. Rhinderlander's(1984) study is a very useful report for archaeologists to begin to analyze prices for eighteenth century ceramics. We addressed whether ceramics can be used as an indicator of status on eighteenth century sites by using data from the Voorlezer House site and comparing it to ceramic data from the Clermont site.

Archaeologists must look at the variables that can affect consumer choices. The general hypothesis that site location on waterways eliminates market access as an important variable effecting eighteenth century consumer choices has been tested by Baugher and Venables (1985a). Seven sites in colonial New York were examined to determine the type and diversity of wares present at both urban and rural sites. During the eighteenth century, no difference was found in the quality and diversity of the imported wares found on Manhattan, on Staten Island, and in upstate New York. The similarity of the range and quality of the artifacts found on the Staten Island sites, the upstate sites, and on those sites in Manhattan therefore suggests that social class and economic wealth, not geographic location, determined what a colonial New Yorker obtained.

Was socio-economic status was a major factor in determining eighteenth century consumer choices? If so, then we would expect that both upper and middle class colonial families owned some of the same status wares. The difference in their possessions would not be in the quality of their wares but in the quantity of these wares. Two sites (the Voorlezer House site and Clermont) are used here to exemplify this hypothesis (see Figure 5:5). This study is taken from a lenghty article by Baugher and Venables (1985a) on ceramics as status indicators in eighteenth century New York.

The Hudson Valley site of Clermont is a New York State historic park and includes an original eighteenth century home. The excavation of this site was sponsored by the New York State Historic Trust and the

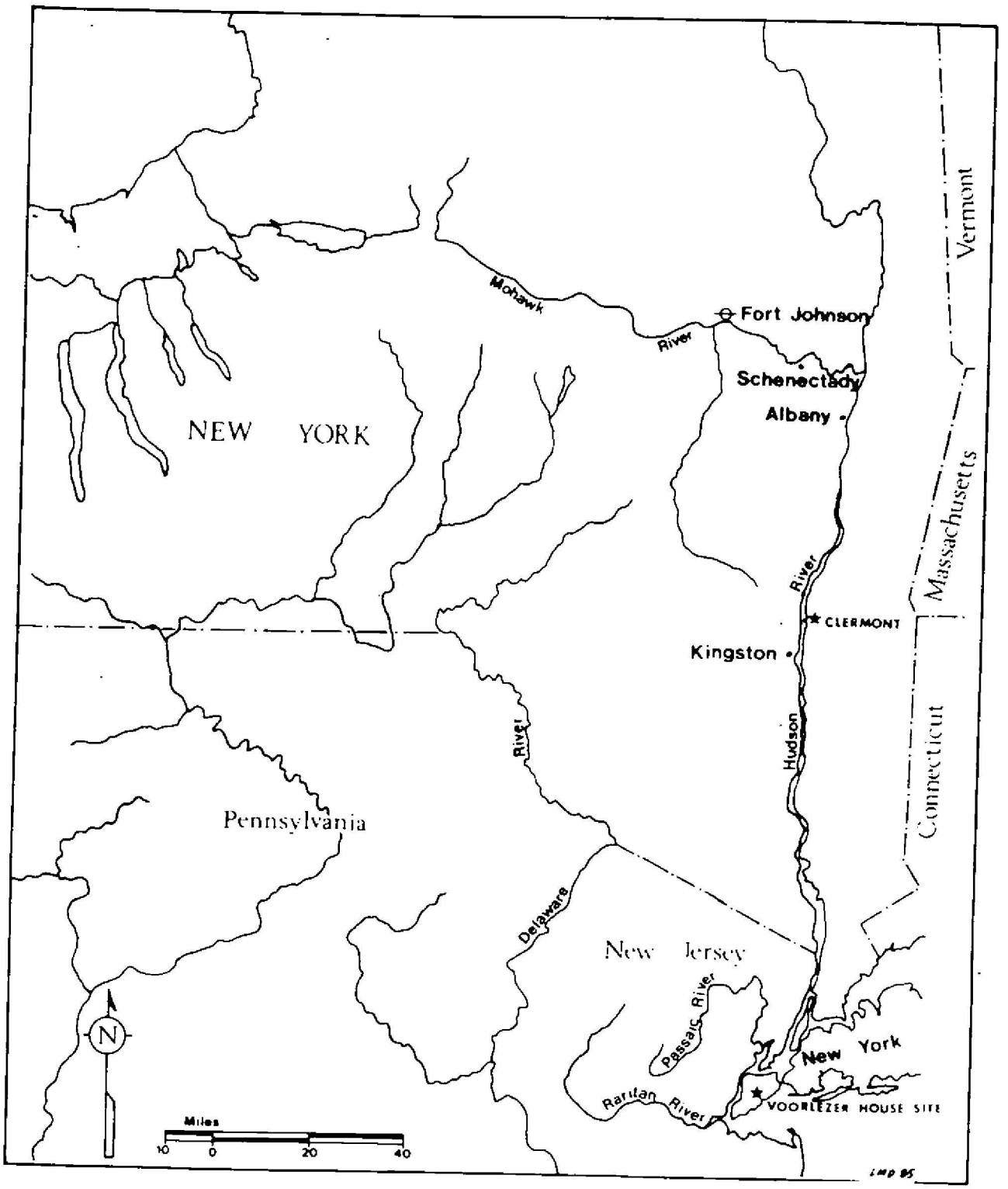


Fig. 5:5 Map of N.Y. State showing the location of the Voorlezer House and Clermont sites. Map adapted from "Iroquois Frontier 1768-1780" in James Adams' Atlas of American History. Map drafted by Louise DeCesare.

Bureau of Historic Sites. The staff of the archaeology unit within the Bureau of Historic Sites excavated this site, with Lois Feister (1981) writing the Clermont report.

Clermont is located in the Hudson River Valley between the towns of Tivoli and Germantown, fifty miles south of Albany and about one hundred miles north of the colonial city of New York. In 1782, the Livingston family built the mansion at Clermont upon the ruins of a 1730 house which was also owned by the Livingstons (Feister 1981: 39). The 1730 house was burned by the British in 1777. In the 1690s, the affluent Livingston family lived in lower Manhattan on the site of 7 Hanover Square and acquired property on the Hudson River near Albany. The most famous resident of Clermont was Robert Livingston: a member of the committee which drafted the Declaration of Independence, a Minister to France responsible for the Louisiana Purchase in 1803, and a partner with Robert Fulton in their successful steamboat venture the Clermont, in 1807.

The Clermont and Voorlezer House archaeological sites were excavated for the same purpose -- to sample the site prior to construction work. The excavations were confined to areas of the property that were going to be destroyed by construction projects. In both cases the construction work was postponed to allow time for an archaeological excavation. The artifacts from the two sites were sheet scatter deposits and no artifacts were from features. The ceramic assemblages from each site are fairly similar in size. The artifacts are from sites which contain a clearly documented use and ownership. The artifacts can be attributed to specific families.

For the quantitative study of ceramics from the sites, the data was divided into two broad categories, expensive and inexpensive wares. Within each broad category the material was divided into ware types; for example, porcelain, creamware, and pearlware (see Figure 5:6). The category utilitarian stoneware encompassed both American and European stoneware, and because of the Rhinelander data, Nottingham ware was included in this group. American-made pottery also was unearthed at Clermont in upstate New York.

Both sites contain a similar diverse selection of quality table-wares and kitchenwares. The artifact types found at both sites were the same kinds of wares which were being imported by Frederick Rhinelander, proprietor of china, glass, and earthenware store in Manhattan from 1770 to 1786. Schwind (1984) found that delft and white salt-glazed stoneware were still popular wares in New York in the 1770s and 80s and pearlware was being imported by Rhinelander as early as 1780. These quality tablewares (both decorated and undecorated) were found at both sites.

A comparison of the middle class site on Staten Island with an aristocratic site (Clermont), confirms the obvious: middle class

	VOORLEZER HOUSE		CLERMONT	
Type of Ware	**%**	**# of Sherds**	**%**	**# of Sherds**
Porcelain	4.2	10	14.0	10
Creamware	11.8	28	37.0	26
Pearlware	12.2	29	11.0	8
White Salt-glazed Stoneware	5.9	14	10.0	7
Delft	5.0	12	4.0	3
Buff Earthenware	23.9	57	13.0	9
Redware	24.8	59	7.0	5
Other Stoneware	11.8	28	3.0	2
Whiteware *	0.4	1	—	—
Total	100.0	238	100.0	70

Figure 5:6 A comparison of ware types from Clermont and Voorlezer House sites. The chart presents a variety of eighteenth century ceramics found at these two sites. The one whiteware sherd from the Voorlezer House represents slippage due to water problems during the last day of the dig.

colonists could not afford the number of high quality wares that the aristocrats could. That said, there is some evidence of a middle class emulation of the aristocratic tastes — what the eighteenth century referred to as "apeing" one's betters. Thus traces of a few of the highest quality goods were found at the middle class site. The Rezeau family had porcelain tea bowls but porcelain comprised only 4.2% of their collection, whereas it comprised 14% of the Livingston collection. The Livingstons had more than three times as much cream ware and almost twice as much delft. The Livingstons not only owned more status wares but they may have used these wares more frequently than the Rezeaus. The Rezeaus' status wares may have been their special occasion dishes. The Livingston's higher discard rate of porcelain and cream ware may have been due to both more frequent use and generally more dishes. Predictably the proportions are reversed when comparing utilitarian wares with the Rezeaus having the higher proportions of these kitchenwares (the Rezeaus had three times as much redware, four times as much stoneware, twice as much buff earthenware as the Livingstons). The Rezeaus' very high percentage of stoneware may be attributed to their easy access to the stoneware potteries in New Jersey.

Can Ethnic Patterns Be Inferred from these Eighteenth-Century Ceramics

As mentioned in the introduction, some archaeologists have tried to analyze artifact collections in order to find examples of ethnic preferences in the choice of the material goods that were acquired and then discarded. After a thorough examination of the historical literature on eighteenth century trade networks, we felt that this was not a valid research question for our study. Smuggling aside, the colonists primarily bought British goods because of the British colonial policy of merchantilism. Because of the Navigation Acts, colonists did not have a wide choice of European goods. They could choose, within a wide range of styles and prices of British goods, but essentially they were buying British.

Ceramic Differences in the Rezeau/Johnson versus the Van Pelt Artifacts

The Rezeau/Johnson family had some status wares: some creamware and pearlware dishes, some tea sets made out of white salt-glazed stoneware and other tea bowls were made of oriental export porcelain. They also had bowls made out of delft (both decorated and plain white bowls). They used British-made yellow earthenware for their utilitarian wares (their mixing bowls, baking pans, crocks, etc.) and as well as purchasing local redwares. After the Revolutionary War, this family still bought British dishes, but their utilitarian wares were American-made redwares and stonewares.

The Van Pelts, like their ancestors the Rezeau/Johnsons, purchased some status wares. The Van Pelts owned a variety of British pearlware and creamware dishes. They owned an almost equal number of decorated (transfer printed, handpainted, and colored edgewares) dishes and undecorated dishes. During the period 1800-1820, the most expensive British dishes were the transfer printed wares, followed by the other decorated wares. The least expensive dishes were the undecorated creamwares (Miller 1980:7). In addition, they owned Chinese export porcelain dishes, possibly a tea set. Their utilitarian wares were American-made redwares and stonewares. There does, however, seem to be a slight increase in the number of status wares purchased by the Van Pelts as compared to their relatives the Rezeaus and the Johnsons.

Differences in Nineteenth Century Residential and Commerical Use

The changes in the nineteenth century use of the house from residential to commercial use was not as dramatic as one would expect. First, the Rosenberg family (owners from 1883-1924) operated a dry goods store in the Voorlezer House (1883-1893) while they continued to reside in the house. This means that potentially there is a mixture of residential and commercial garbage. However, dry goods are primarily fabrics contained in or displayed on wooden holders; this material does not survive well in the archaeological record (in the alternating moist and dry environment at the Voorlezer house site, wood and fabric artifacts would deteriorate more rapidly than in a more stable environment). Thus it is not surprising that we did not find any artifacts that could be attributed to the dry goods business. Second, in dating the deposit, we could only narrow our date range to the period 1870-1900. This means that this refuse also included garbage that was deposited by the Mooney family (owners of the house from 1872-1883) who were not engaged in house-related commercial activities. Third, in the 1890s, the Rosenbergs added a major addition to the northern side of the house, gave up their dry goods business, and changed the use of the Voorlezer House to another mixed commerical-residential use --they opened a restaurant and a very small hotel (the "Arlington House" operated from 1893-1924). The restaurant/hotel related artifacts from the period 1893-1900 were mixed in the same deposit as the artifacts from the Mooney family, the dry goods store period, and the residential artifacts from the Rosenberg family. Thus while the documentary record demonstrates a change in the use of the house during the Rosenberg occupation to include commercial as well as residential activities, the archaeological evidence does not supplement or clarify this research question.

Nineteenth Century Trade Networks

In the nineteenth century, the Van Pelt family acquired imported ceramic dishes and tea sets from Britian and China. Their utilitarian wares were American-made, some were probably made in New Jersey. In the mid-nineteenth century, the major change in ceramics was from British-made dishes to American-made table settings. This change is noticable during the period 1870-1900 (the Mooney/Rosenberg period of ownership of the site). Unfortunately, even though there were numerous bottle glass fragments, there was not enough embossed information on the glass sherds to discuss trade networks.

Twentieth Century Use of the Property

In the twentieth century, there was a tremendous discrepancy between the number of artifacts disposed of inside and outside the building; eleven artifacts were unearthed in the area originally outside the building (see Figure 5:7) and 2,337 artifacts were uncovered in the original basement area (see Figure 5:8). The material deposited inside the basement may have been deposited by the Rosenbergs, owners/proprietors of the resturant/hotel "the Arlington Hotel" (1893 to 1924), by Marie Petersen owner of the house and resident from 1924 to the early 1930s,by Nicholas George proprietor of the restaurant "Confectionary" (1925-1933) and then the restaurant-tavern "Acorn Inn" (1933-1936) and later by the construction crew during the reconstruction of the house (1938-1942). The high percentage of nails and window glass (1,133 artifacts in the twentieth century versus no more than 70 glass and nail artifacts for each of the eighteenth and nineteenth century occupants) was probably discarded by the construction workers during the house's renovation in the 1930's. An unusually high percentage of bottle glass was found in the twentieth century levels (825 pieces versus no more than 25 pieces for earlier occupants). This bottle glass may have been discarded when the buildings was being used as the "Acorn Inn", 1933-1936. This association with the Acorn Inn period is further supported by the number of beer, wine, whiskey, and soda bottles that were unearthed; and, in contrast to this, the majority of the bottles found in the period 1870-1900 were food/household or medicine bottles.

There was more than just demolition debris in this twenthieth century basement. There were numerous broken dishes and even remains from meals. Of the 2,348 artifacts found in this level dating 1900-1940, a surprising 99.1% (2,337) of the artifacts were found in the area of the original basement. This amount of garbage in the original basement area is surprising given the general concern for sanitation in the late 19th and early 20th century. By 1900, Staten Island had almost borough-wide garbage collection service (Staten Island Borough President's Report 1902). Yet the inhabitants of the Voorlezer House

VOORLEZER HOUSE: BACKYARD AREA

FIGURE 5:7 ARTIFACT DEPOSITION BY SUCCESSIVE OCCUPANTS

LEVELS	TIME PERIOD	OCCUPANTS	TOTAL	HOUSEHOLD			ARCHITECTURAL	
				CERAMICS	GLASS BOTTLE FRAGMENTS	GLASS BOTTLES LIPS & BASES	NAILS	WINDOW GLASS
1	20th century	Nicholas George The Rosenbergs	11	11	0	0	0	0
2-4	1870 - 1900	The Rosenbergs The Mooneys	104	47	19	0	27	11
5	1850 - 1870	Susannah Van Pelt and Harriet Wheatley	121	18	19	0	78	6
6	1820 - 1850	Susannah and Cavalier Van Pelt; Harriet Wheatley	77	20	18	0	27	12
7-8	1800 - 1820	The Van Pelts	287	126	28	1	62	70
9-10	1780 - 1800	Jacob Rezeau/ The Johnsons	224	124	21	1	26	52
11-14	1740 - 1770	The Rezeaus	210	91	62	0	9	48

VOORLEZER HOUSE: BASEMENT AREA
FIGURE 5:8 ARTIFACT DEPOSITION BY SUCCESSIVE OCCUPANTS

LEVELS	TIME PERIOD	OCCUPANTS	TOTAL	HOUSEHOLD			ARCHITECTURAL	
				CERAMICS	GLASS BOTTLE FRAGMENTS	GLASS BOTTLES LIPS & BASES	NAILS	WINDOW GLASS
1-3	20th century	Nicholas George The Rosenbergs	2337	327	825	52	216	917
4	1870 - 1900	The Rosenbergs The Mooneys	78	35	7	4	18	14
5-6	1820 - 1850	Susannah and Cavalier Van Pelt	181	101	3	9	19	49
7	1800 - 1820	John and Susannah Van Pelt	29	10	15	1	1	2
8-10	1762 - 1800	The Rezeaus/ The Johnsons	4	3	0	0	1	0

were taking great care not to dispose of their garbage outside their house. So how do we account for this? First we have to confront the fact that in every society there are people who are atypical of their society and their time. Every culture has its eccentrics. Today there are newspaper articles about wealthy individuals living in homes or apartments filled with debris to the point that the home has becomne a fire and safety hazard. The twentieth century occupants of the Voorlezer House site,either the owners or later the renter (Nicholas George), may have simply used the basement as a storage area, and when objects broke, they were simply left in the building.

At the Prall site (located 1/2 block due east of the Voorlezer House), the owners of lot 11, from 1918-1928, left a tremendous amount of garbage (from kitchen debris to parts of two Model T Fords) buried in their backyard (Baugher-Perlin 1978). Therefore, we know of a second example for Richmondtown of people disposing of garbage in a way that differed from the norm. Why was this a neighborhood phenomenon?

Dietary Study

Faunal analysis is a useful tool for understanding and recreating past dietary patterns. A professional faunal analyst looks at the distribution of meat types; the presence or absence of butcher marks; and the context from which the bones were recovered in order to discuss dietary and consumption patterns. Information of this type, used in conjunction with documentary evidence, can be used to illuminate the relationship between diet and socio-economic status, resource availability, personal preference, and ethnicity. The Voorlezer House site faunal assemblage was analysed by Kate T. Morgan, and this summary is based on her research (see Appendix 4).

Faunal remains from the Voorlezer House site collection were identified and catalogued according to their genus — i.e. cow, pig, etc. -- whenever possible. Because of the difficulty in discerning sheep from goat bones, a distinction was not attempted, and bones of this type are all classified as "sheep/goat." Those bones which could not be identified by genus were grouped according to class (e.g. mammal, and "R.A.A.P." — rodent, aves, amphibian, and pisces). The presence and type of butcher marks ("chop," "chop and break," and "sawed striae") were also recorded.

Bones were catalogued according to date ranges which were derived from the ceramic analysis by Baugher and Baragli. Bones from the backyard area were catalogued separately from those found in the basement to determine potential differences in depositional patterns.

In quantifying the data, the total number of bones was calculated for each genus/class within a particular date range. The total number of bones recovered from the site, particularly in the basement area, was unusually low, making the statistical analysis less reliable. As a

result, the bones from the basement area were grouped according to century, not house occupant. Because of this, the basement data was only used for analysis of twentieth century dietary patterns.

The faunal remains from the Voorlezer House site show a distinct pattern in their deposition. While an overwhelming majority of the bones were recovered from the backyard — 70.2% -- the entire twentieth century deposit came from the basement area. Kate Morgan raises the question as to whether later inhabitants were dumping garbage in the basement, while earlier inhabitants deposited their refuse outside in the backyard. This question was addressed by Baugher earlier in the chapter. While it has been found to be fairly common for eighteenth century and early nineteenth century families to dispose of waste in the backyard of their homes, there was a change in garbage disposal practices in the mid to late nineteenth century. With the advent of public trash collection and an awareness of the hazards of improper sanitation in the latter part of the nineteenth century, it seems odd that the only significant basement deposit of garbage should date from the twentieth century.

At the Voorlezer House site, butcher marks on the eighteenth century bones were "chop" or "chop and break." These marks are indicative of home butchery practices. In contrast, the nineteenth and twentieth century material had "sawed striae" perhaps indicative of commerically-cut meat. This may suggest that the meat eaten in the eighteenth century by the Rezeau/Johnson families was raised by the owners and that the animals were probably butchered on the premises. This is not surprising since both families were farmers. Conversely, butcher marks from the bone assemblage of the nineteenth and twentieth centuries were sawed straie, indicating that meat cuts may have been purchased from a professional butcher.

A complete reconstruction of dietary patterns is impossible without documentary evidence. The archaeological process is selective by its very nature. Only foods which involve a leftover (for example, bones, shells, or seeds) have a chance of finding their way into the archaeological record. Even then, these remains often are not preserved. Food such as ground meat, and jarred or canned meat or canned seafood, not to mention such staple foods as bread and dairy products, would not leave any traces in the archaeological record. Nevertheless, the Voorlezer House faunal collection gives us some insight into what kinds of food the occupants were eating. Among the families who occupied the house in both the eighteenth and nineteenth centuries, meat (as opposed to fish and fowl) was evidently predomoninant. All the periods associated with families show a high percentage of mammal remains and a relatively low percentage on non-mammal (fish, bird, amphibian, and rodent). Pork appears to compose a significant portion of the diet throughout both centuries. Morgan, however, suggests that the high number of pig bone fragments might be accounted for by virtue of their fragility relative to cow bones which do not break as often. Hence the number of bone fragments may have skewed the ratio of the fragments of pig bone to cow bone. That said,

the percentage of beef is noticably higher during the Van Pelt ownership of the house. While beef was used by the Mooney family and Rosenbergs, it was evidently not the most significant part of their diet. The increased number of bird bones in the late nineteenth and early twentieth cenuturies also seems to indicate a shift in the importance of fowl, including chicken, within the diet. For the rest of the twentieth century period, fowl appears to be the predominant food within the diet, followed by beef.

Currently, archaeologists are turning their attention to the study of dietary patterns. Unfortunately, only a few dietary studies have been completed and published. However, some archaeological statements about diet can be made. Williamsburg archaeologist Audrey Noel Hume (1978) asserts that pork was important in the diet of people in every class of eighteenth century colonial life — "pig bones are to be found in nearly every eighteenth century deposit..." However, she maintains that beef was the preferred meat — "whether served fresh or salted, there is no doubt that in the eighteenth century, just as today, the most popular meat on Virginia tables was beef" (Audrey Noel Hume, 1978: 16, 12). In their archaeological investigation of a nineteenth century boarding house context on the Telco Block in Manhattan, Rockman, Harris, and Levin (1982) found a large deposit of cow bones but unusually few pig bones.

In her study of urban foodways in Atlanta, Paula Edmiston Davidson (1982) addresses the question of how socio-economic status; personal and ethnic preference; and resource availability may play a role in shaping these dietary patterns. She interviewed an elderly resident from an early twentieth century community under archaeological study. The oral history revealed that within the community of Edgewood, beef was the most expensive meat and was purchased at retail stores. Pork and fish were less expensive, but also less popular. The resident (referred to as Mrs. Cooper by Edmiston Davidson), recalled that cows were kept for milk while chickens were raised for both their eggs and meat. Family preferences and idiosyncrasies were also important. To Mrs. Cooper's family, turkey was strictly a holiday meal while beef and chicken were favorite meats eaten all year round. Pork, on the other hand, was only eaten in the winter months.

In looking at the Voorlezer House dietary patterns in terms of these factors, the predominance of pork may be a result of personal preference, or perhaps resource availability, rather than socio-economic status. Unlike cows or beef cattle which breed slowly, pigs breed quickly. In the eighteenth century, when meat was not purchased from a professional butcher, it seems plausible that pigs could have been raised as a source of food. During John Van Pelt's residency, beef was the most important meat in his family's diet. After his death in 1826, his widow, son and grand-daughter continued to live in the house and we see a shift to pork and fowl. As was mentioned in the previous chapter on the history of the Voorlezer House property, the occupants of the house during this period of time (1800-1872) were not struggling financially. While it has been suggested that pork was less

expensive and generally less popular than beef, perhaps the later Van Pelts had a personal preference for pork.

Because the change in ownership in the period 1870-1940 does not directly correspond to the time periods which can be identified archaeologically, interpretations of these occupations can only be speculative. In the period 1883-1924, an Austrian Jewish family, the Rosenbergs, lived at the Voorlezer House. From 1883-1893, the Rosenbergs used the house as a dry goods store and residence, and from 1893-1924 as a residence and a hotel/saloon (the Arlington Hotel). The increase in beef and fowl may be tied to its use as a hotel. In addition, Jewish dietary laws prohibit the use of pork, so it is not surprising to see a noticable change in food preferences. The fewer pork bones which do date from the period 1870-1900 probably reflect the dietary patterns of the Irish family, the Mooneys. In the period 1925-1938, Nicholas George used the Voorlezer House as a residence and restaurant (the Acorn Inn). The few pork bones that are found in the twentieth century levels may be attributed to Nicholas George.

The study of the Voorlezer House site faunal collection gives us some insights into what the eighteenth, nineteenth, and twentieth century inhabitants of this particular site were eating. This information should make an interesting contribution to the interpretation of the site for the public.

Exhibitable Artifacts

An exhibit of selected artifacts could provide the museum visitor with a more tangible insight into the lifestyles at the Voorlezer House site. We suggest the following artifacts drawn from five periods: 1740-1780(Rezeau); 1780-1800 (Rezeau/Johnson); 1800-1870 (Van Pelts); 1870-1900 (Mooney/Rosenberg); and 1900-1940 (Rosenberg/Peterson/George/ Staten Island Historical Society).

A. In the period 1740-1780 (Rezeau/Johnson occupancy):

1. Decorated clay smoking pipes with the insignia of Robert Tippet, a pipemaker from Bristol, England, circa 1760.

2. A purple sponged delft bowl fragment with the fish design(see Figure 5:3)that was made in England.

3. A British-made white salt-glazed stoneware tea bowl and fragments from a tea set.

4. Fragments from British-made white salt-glazed plates with a scratch blue design (see Figure 5:4).

5. A rim of a redware pie plate. This sherd of colonial-made pottery has a green and yellow slip that is distinctive of eighteenth century Philadelphia-made redware (Ellen Denker, former museum curator and redware and stoneware specialist, February 1985).

All of these sherds and the pipe fragments were on exhibit in the Staten Island Museum show, "Staten Island Trade Networks: A Study of Community History Through Archaeology".

B. In the period 1780-1800 (Rezeau/Johnson occupancy):

1. A sherd of a locally made stoneware crock, with a blue handpainted design on a grayish-pink salt glaze. This sherd was on exhibit in the Staten Island Museum show.

2. Fragments of a Chinese export plate and tea cup.

3. Sherds from British creamware plates.

C. In the period 1800-1870 (Van Pelt occupancy):

1. Fragments from leather shoes present an archaeological example of "clothing".

2. A gouge with a wooden handle, probably used for woodworking.

3. An intact metal thimble for sewing is in excellent condition.

4. There were also kitchen-related pottery sherds that are exhibitable: British-made transfer-printed designed whiteware dishes; locally-made redware pie pans; and fragments from blue designed pearlware dishes.

D. In the period 1870-1900 (Mooney/Rosenberg):

1. A coin slot from either a child's bank or a coin box (perhaps from the dry goods or resturant business).

2. A child's white ceramic marble (in the Census of 1875, the Mooney family had three children under the age of ten and in the 1880 Census, the Rosenberg family had three children under the age of five.

3. A lovely transfer-printed whiteware water pitcher made in East Liverpool, Ohio in the 1890s. It has been partially reconstructed and was on exhibit in the Staten Island Museum.

E. In the period 1900-1940 (Rosenberg/Peterson/George/Staten Island Historical Society occupancy):

1. An intact whiskey sign (complete with holes so that the sign can be displayed).

2. A metal salt shaker top.

3. Sherds of inexpensive, American-made, white, undecorated dishes that were (and still are) used in inexpensive resturants.

4. A 1924 dog's license.

5. A toy panel truck.

6. A child's tea cup.

These artifacts are a good cross-section of the materials used by the people who lived at the Voorlezer House site.

Summary

The Voorlezer House site archaeological excavation has provided the Staten Island Historical Society with material evidence of the daily life at the site for two and a half centuries. The site has a fascinating ethnic history, including members of three of the most significant refugee groups in the American experience: the Huguenots in the colonial period, and the Irish and the Jews in the nineteenth century. Interestingly, the Huguenot, the Irish, and the Jewish families who lived at the Voorlezer House site all seem primarily assimilative in the material culture which has survived archaeologically. Ethnic and religious diversity was undoubtedly demonstrated by the various inhabitants at the Voorlezer House site in ways (such as in religious ceremonies or language) that do not survive archaeologically because they are intangible, are composed of perishable physical materials, or were removed from the site.

This is the first French site and the first Jewish site excavated by archaeologists in any of the five boroughs of New York. The most detailed information that we uncovered pertained to the one hundred and sixty-seven year ownership of the site by the Rezeau family (French Huguenots) and their descendants. The Rosenberg family (Austrian Jews) occupied the site for forty-one years.

In addition to its focus on the history of these particular families, this archaeological report makes comparisons with other sites in order to place the Voorlezer House site in a larger context of Staten Island history and of regional history. The archaeology of the Voorlezer House site demonstrates both the daily life of the residents and the evidence of wider trade patterns and fashions. The archaeology thus provides us with insights into what two hundred and fifty years of life in Richmondtown shared in common with the American mainstream.

BIBLIOGRAPHY

PRIMARY SOURCES

PUBLIC DOCUMENTS

Abstracts of Wills, on file in the Geneaological Room, New York Public Library, 42nd. Street.

Borough President's (Staten Island) Annual report, 1902, on file in the Archives of the Staten Island Institute of Arts and Sciences

Book of Patents, on file at the Richmond County Court House.

Census, New York State, transcriptions on file at the Staten Island Historical Society

Census, United States, transcriptions on file at the Staten Island Historical Society.

City Directories 1911 and 1914, on file at the Staten Island Historical Society.

Letters of Administration, located in the Richmond County Borough Hall.

Liber of Deeds, located in the Richmondtown County Court House.

Liber of Mortgages, located at the Richmond County Court House.

Road Assessment Taxes, 1817-1820, on file at the Staten Island Historical Society.

Town Book of Westfield, 1757-1819; on file in the Archives of the Staten Island Historical Society.

Wills, on file at the Richmond County Borough Hall.

SECONDARY SOURCES

Adams, James Truslow, Editor in Chief
1943 Atlas of American History. Charles Scribner's Sons: New York. Plate 70: "New York [City]" 1776." Plate 78: "Iroquois Frontier 1768-1780."

Anderson, Albert J. and Donald R. Sainz
1965 "Excavations at Oude Dorp." The New Bulletin, Staten Island Institute of Arts and Sciences, Vol. 14, No. 9: 82-95.

Archer, Michael and Brian Morgan
1977 Fair as China Dishes. International Exhibitions Foundation: Washington D.C..

Baird, Rev. C. W.
1885 History of the Huguenot Emigration to America. Dodd, Mead and Co.: New York.

Baker, Vernon G.
1980 "Archaeological Visibility of Afro-American Culture: An Example from Black Lucy's Garden, Andover, Massachusetts." Archaeological Perspectives on Ethnicity in America. Robert I. Schuyler (ed.), pp. 29-37. Baywood Publishing Company, Inc.: Farmingdale, New York.

Baugher, Sherene
1982 "Hoboken Hollow: A Nineteenth Century Factory Workers' Housing Site." Northeast Historical Archaeology. Vol. 11: 26-38.

Baugher, Sherene and Robert W. Venables
1985a "Ceramics as Indicators of Class and Status in Eighteenth Century New York." Socio-economic Status and Consumer Choices in Historical Archaeology. Suzanne Spencer-Wood (ed.). Plenum Publishing, Corp.: New York.

1985b "Trade Networks and Archaeology: Colonial and Federal Periods." Manuscript on file in the Archives of the Staten Island Institute of Arts and Sciences.

Baugher-Perlin, Sherene
1978 The Prall Site: A Case Study in Historical Archaeology. Ph.D. dissertation, S.U.N.Y. at Stony Brook. University Microfilms: Ann Arbor, Michigan.

Binford, Lewis
1961 "A New Method of Calculating Dates from Kaolin Pipe Stem Fragments." Southeastern Archaeological Conference Newsletter. Vol. 9, No. 1: 19-21.

Board of Education of the City of New York
1964 Staten Island: A Resource Manual for School and Community. The Board of Education of the City of New York: New York.

Bostwick, John A.
1980 "The Plaza II Site Excavation of a Colonial Spanish Well in St. Augustine, Florida." Historical Archaeology, Vol. 14: 73-81.

Davis, William T.
1889 "Homestead Graves." Proceedings of the Natural Science Association of Staten Island. Special No. 9.

1926 The Conference or Billopp House, Staten Island, New York. Staten Island Historical Society: Staten Island, New York.

Deagan, Kathleen
1978 "The Material Assemblage of 16th Century Spanish Florida." Historical Archaeology, Vol. 12: 25-50.

De Cunzo, Lu Ann
1982 "Households, Economics and Ethnicity in Paterson's Dublin 1829-1915: The Van Houten Street Parking Lot Block." Northeast Historical Archaeology. Vol. 11: 9-25.

Deetz, James
1968 "Late Man in North America: Archaeology of Europeans." In Anthropological Archaeology of the Americas, Betty Meggers (ed.), pp. 21-30. The Anthropological Society of Washington: Washington, D.C.

1970 "Archaeology as a Social Science." Current Directions in Anthropology, Vol. 3, No. 3: 115-125.

1977 In Small Things Forgotten: The Archaeology of Early American Life. Doubleday: New York.

Delevan, Edward C. Jr.
1916 "The Guyon House." Proceedings of the Staten Island Association of Arts and Sciences, Vol. VI, Part II: 113-139.

Dorr, Frank
1969 "Nails." Encyclopedia Americana, Vol. 19: 682-683.

Edmiston Davidson, Paula
1982 "Patterns in Urban Foodways: An Example From Early Twentieth-Century Atlanta." Archaeology of Urban America: The Search for Pattern and Process. Roy S. Dickens, Jr., (ed.), Academic Press: New York.

Evans, William S., Jr.
1980 "Food and Fantasy: Material Culture of the Chinese in California and the West, circa 1850-1900." Archaeological Perspectives on Ethnicity in America. Robert I. Schuyler (ed.), pp. 89-96. Baywood Publishing Company, Inc.: Farmingdale, New York.

Feister, Lois M.
1981 "Archaeological Testing at Clermont State Historic Park, Town of Clermont, Columbia County, for a Proposed Telephone-Electric Line." The Bulletin and Journal of Archaeology for New York State, No. 83, Fall, 39-45.

Ferguson, Leland
1980 "Looking for the 'Afro' in Colono-Indian Pottery." Archaeological Perspectives on Ethnicity in America. Robert I. Schuyler (ed.), pp. 14-28. Baywood Publishing Company, Inc.: Farmingdale, New York.

Fontana, Bernard and J. Cameron Greenleaf
1962 "Johnny Ward's Ranch: A Study in Historical Archaeology." The Kiva, Journal of the Arizona Archaeological and Historical Society, Vol. 28, No. 1 and 2: 1-115.

Guilland, Harold
1971 Early American Folk Pottery. Chilton Book Co.: Philadelphia

Harrington, J.C.
1959 "Archaeology as an Auxiliary Science to American History." American Anthropologist, Vol. 57: 1121-30.

Haughwout, Lalford M.A.
1937 "The Voorlezer's House at Richmond: The Documentary Evidence." Paper on file in the Archives of the Staten Island Historical Society.

Hesseltine, William
1959 "The Challenge of the Artifact." In The Present World of History, James Rodabaugh (ed.), pp. 64-70. The American Association for State and Local History: Madison, Wisconsin.

Hill, Glenna See (Compiler)
1975 Huguenot Ancestors. Documented by the Huguenot society of New Jersey. Allen Printing: Cranford, New Jersey.

Hine, Charles Gilbert
1915 The Story and Documentary History of the Perine House. Staten Island Antiquarian Society: Staten Island, N.Y.

Jockin-la Bastide, J. A. and G. van Kooter, eds.
1981 "Cassell's English-Dutch/Dutch-English Dictionary. Two vols. in one. Macmillan Publishing Co., Inc.: New York.

Johnston, A. J. B.
1983The Summer of 1744: A Portrait of Life in 18th-Century Louisbourg. National Historic Parks and Sites Branch, Parks Canada: Ottawa.

Kimball, Fiske
1966 Domestic Architecture of the American Colonies and of the Early Republic. Dover Publications, Inc: New York.

Lathrap, Donald
1955 "An Archaeological Classification of Culture Contact Situations." In Seminars in Archaeology: 1955 (A Memoir of the Society for American Archaeology #11), Robert Wauchope (ed.), pp. 1-30. The Society for American Archaeology: Salt Lake City.

Leng, Charles and William T. Davis
1930 Staten Island and Its People: A History, 1609-1929, Vol. I and Vol. II. Lewis Historical Publishing Co: New York.

Mc Millen, Loring
1937 "Structural Evidence of the Voorlezer House." Paper on file in the Archives of the Staten Island Historical Society.

1941 "Staten Island Architecture, Part III." Staten Island Historian, Vol. 4, No. 4: 25-32.

Miller, J. Jefferson and Lyle Stone
1970 Eighteenth Century Ceramics from Fort Michilimackinac. Smithsonian Institution Press: Washington, D.C.

Miller, George I.
1980 "Classification and Economic Scaling of 19th Century Ceramics." Historical Archaeology, Vol. 14: 1-40.

Noel Hume, Audrey
1978 "Food." Colonial Williamsburg Archaeological Series. No. 9, The Colonial Williamsburg Foundation: Williamsburg, Virginia.

Noel Hume, Ivor
1969 Historical Archaeology. Alfred A. Knopf: New York.

1970 A Guide to Artifacts of Colonial America. Alfred A. Knopf: New York.

Pirsson, John
1889 The Dutch Grants, Harlem Patents and Tidal Creeks. I.K. Strouse and Co.: New York.

Reid, C.S. "Paddy"
1976 "Clay Pipes in the Upper Great Lakes: The Ermatinger Assemblage." Northeast Historical Archaeology. Vol. 5, No. 1-2, Spring: 3-5.

Rockman, Diana, Wendy Harris and Jed Levin
1982 "Appendix D: Patterns in Urban Foodways: Telco Block Features TCAM and TCAX." The Archaeological Investication of the Telco Block, South Street Seaport Historic District, N.Y., N.Y. Soil Systems Inc.: New York, N.Y.

Safford, Raymond
1940 "Richmond County Public Buildings Prior to 1800." Staten Island Historian, Vol. 3, No. 4: 25-32.

Schuyler, Robert L.
1980 "Introduction." Archaeological Perspectives on Ethnicity in America. Robert L. Schuyler (ed.), pp. 1-2. Baywood Publishing Company, Inc.: Farmingdale, New York.

Schwind, Arlene Palmer
1984 "The Ceramic Imports of Frederick Rhinelander, New York Loyalist Merchant." Winterthur Portfolio, Vol. 19, No. 1:21-36.

Shapiro, Arthur
1972 New York City's Last Frontier. Staten Island Institute of Arts and Sciences: Staten Island, New York.

Spargo, John
1972 The Potters and Potteries of Bennington. Dover Publications: New York.

Steinmeyer, Henry
1950 Staten Island, 1524-1898. Staten Island Historical Society: Staten Island, New York.

Stillwell, John
1903 Historical and Genealogical Miscellany Data Relating to the Settlement and Settlers of New York and New Jersey, Vol. 1. New York Genealogical and Biographical Society: New York.

Staten Island Chamber of Commerce
1972 Statistics Guide. Staten Island Chamber of Commerce: Staten Island.

Venables, Robert W.
1985 "An Historical Overview of Staten Island's Trade Networks." Manuscript on file in the Archives of the Staten Island Institute of Arts and Sciences.

Vosburgh, Royden Woodward
1923 History of the Reformed Protestant Dutch Church at Richmond Staten Island. Bound and typed manuscript on file in the Archives of the Staten Island Institute of Arts and Sciences.

Walker, I. C.
1977 Clay Tobacco Pipes with a Particular Reference to the Bristol Industry. 4 Volumes. National Historic Parks and Sites Branch, Parks Canada, Department of Indian and Northern Affairs: Ottawa.

Appendix 1: Blank Catalogue Sheets

[redacted]e:_____

Ceramic Totals

Levels	Ware types: White	Pearl	Cream	Porcelain	Stone	Red	Buff	Delft	Dates 18^{th}C	19^{th}C
[redacted]1										
[redacted]2										
[redacted]3										
[redacted]4										
[redacted]5										
[redacted]6										
[redacted]7										
[redacted]8										
[redacted]9										
[redacted]0										
[redacted]1										
12										
13										
14										

PORCELAIN

SITE:

SQUARE:

LEVEL:

TOTAL COUNT:

	EUROPEAN/ AMERICAN	ORIENTAL EXPORT	CANTON/ NANKING	COMMENTS
BLUE				
OTHER MONOCHROME				
POLYCHROME				
GILDING				
OTHER MONOCHROME WITH GILDING				
POLYCHROME WITH GILDING				

WHITEWARE

SITE:

SQUARE:

LEVEL:

TOTAL COUNT:

	UNDECORATED	TRANSFER-PRINTED	HAND-PAINTED	DECAL	COMMENTS
WHITE					
BLUE					
GREEN					
BROWN					
BLACK					
MAROON					
PINK/RED					
POLYCHROME					
OTHER					

Stoneware

Site:

Square:

Level:

Total Count:

	Section	Function	Date	Comments
White Undecorated				
Scratch-Blue				
Slip-dipped				
Grey Undecorated				
Incised				
Painted				
Brown Undecorated				
Slip				
Nottingham				
Other				

BUFFWARE

SITE:

SQUARE:

LEVEL:

TOTAL COUNT:

	NO SLIP	SLIP	OTHER	COMMENTS/DATE
UNGLAZED				
CLEAR GLAZE				
DARK BROWN GLAZE				
METALLIC BROWN GLAZE				
BLACK GLAZE				
MOTTLED BROWN GLAZE				
SPOTTED BROWN/ YELLOW				
ROCKINGHAM				
OTHER				

DELFT

SITE:

SQUARE:

TOTAL COUNT:

LEVEL	UNDECORATED	BLUE MONOCHROME	OTHER MONOCHROME	POLYCHROME	COMMENTS
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

PEARLWARE

SITE:

SQUARE:

LEVEL:

TOTAL COUNT:

	COLOR	SHELL-EDGED	FEATHER-EDGED	OTHER-EDGED	COMMENTS
UNDECORATED					
HAND-PAINTED					
TRANSFER-PRINTED					
ANNULAR-WARE					
SPONGEWARE					
FLOW-WARE					
OTHER					

REDWARE

SITE:

SQUARE:

TOTAL COUNT:

LEVEL:

	NO SLIP	SLIP	OTHER	COMMENTS/DATE
UNGLAZED				
CLEAR GLAZE				
DARK BROWN GLAZE				
BLACK GLAZE				
MOTTLED BROWN GLAZE				
JACKFIELD-LIKE				
SPOTTED BROWN/ YELLOW				
OTHER				

CREAMWARE

SITE:

SQUARE:

LEVEL:

TOTAL COUNT:

	SHELL-EDGED	FEATHER-EDGED	OTHER-EDGED	TRANSFER-PRINTED	COMMENTS
UNDECORATED					
BLUE					
GREEN					
BROWN					
BLACK					
MAROON					
PINK/RED					
POLYCHROME					
OTHER					

Site: _____

Smoking Pipes

evels	Stem hole diameter 4/64 frag	4/64 prod	5/64 frag	5/64 prod	6/64 frag	6/64 prod	7/64 frag	7/64 prod	8/64 frag	8/64 prod	9/64 frag	9/64 prod	mean date
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													

1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

Site _____

Square _____

LIPS, NECKS, BASES (GLASS)

TIME PERIODS

LEVEL	1700-1800	1800-1870	1870-1903	1903-1930	POST 1930
1					
2					
3					
4					
5					
6					
7					
8					
9					

SITE

TOYS

SQUARE

LEVEL

1. TEA SETS

FUNCTION	NUMBER	MATERIAL	DESIGN	COMMENTS
CUPS				
SAUCERS				
POTS/BOWLS				

2. DOLLS

FUNCTION	NUMBER	COLOR	MATERIAL	COMMENTS
ARM				
LEG				

3. MARBLES

NUMBER	COLOR	MATERIAL	COMMENTS

4. OTHER

FUNCTION	NUMBER	COLOR	MATERIAL	COMMENTS

SITE _____

SQUARE _____

LEVEL _____

CLOTHING

1. TEXTILE

NUMBER	COLOR	FABRIC	FUNCTION

2. LEATHER

NUMBER	COLOR	FUNCTION

3. BUTTONS

NUMBER	COLOR	MATERIAL	NUMBER OF HOLES

4. BEADS

NUMBER	COLOR	MATERIAL

5. BUCKLES

NUMBER	COLOR	MATERIAL	FUNCTION

6. OTHER

NUMBER	COLOR	MATERIAL	FUNCTION

Site: _____

ARCHITECTURAL TOTALS

Levels	TYPES							DATES	
		NAILS							
	window glass	hand-wrought	cut	wire	nuts/bolts screws	tools	Misc. arch.	18th C	19th C
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

VOORLEZER HOUSE: BRICK

SITE	WEIGHT IN POUNDS

VOORLEZER HOUSE: NAILS

LEVEL	HAND-WROUGHT	CUT	WIRE
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			

WINDOW GLASS

SITE

SQUARE

LEVEL

PRE-1830

TYPE	COUNT	TOTAL	COMMENTS
HEAVILY PATINATED			
THICK WITH BUBBLES			

POST-1830

TYPE	COUNT	TOTAL	COMMENTS
AQUA			
GREEN			
LIGHT GREEN			
YELLOW GREEN			
CLEAR			
CLOUDY			

METAL

Site

Square

Level

TYPE	NUMBER/ WEIGHT	COMMENTS
Nails		
Wrought		
Cut		
Wire		
Spikes		
Wrought		
Cut		
Wire		
Nuts		
Bolts		
Screws		
Hinges		
Tools (pliers, hammers, etc.)		
Cooking & eating utensils		
Bottle caps		
Gun shells, bullets		
Metal & glass fused by fire		
Unidentified metal		
Miscellaneous		

*mus.=mussel
oys.=oyster
sc.=scallop

SHELL*

SITE:

SQUARE:

LEVEL	HINGES	WEIGHT	FRAGMENT COUNT
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			

Appendix 2: Methods of Dating Clay Smoking Pipes

A GUIDE TO

ARTIFACTS OF COLONIAL AMERICA

IVOR NOËL HUME

ALFRED A. KNOPF
1972
NEW YORK

§ *TOBACCO PIPES and SMOKING EQUIPMENT*

The English kaolin tobacco pipe is possibly the most valuable clue yet available to the student of historical sites, for it is an item that was manufactured, imported, smoked, and thrown away, all within a matter of a year or two. Fortunately the shape of the pipe's bowl underwent an easily recognizable evolution that had begun before the start of the seventeenth century and was still going on well through the nineteenth century. In addition, pipes were extremely cheap (selling in 1709 for as little as two shillings a gross), thus making them available to all economic levels of colonial society. They were as expendable as cigarettes, though vastly more durable, ensuring that their fragments survive in the ground in prodigious quantities.

The Indian habit of smoking tobacco by means of a device formed "like a little ladell"[1] became fashionable in England in the 1570's, and by the early seventeenth century the clay pipe had become commonplace. The earliest types, those of the late sixteenth century, were very short-stemmed, some being no more than 1¾" in length, though the average was about 3½". By the third quarter of the seventeenth century the average stem length was between 11" and 12", and by the end of the century many were a little longer still. Lengths of 13" or 13½" seem to have been common during the first half of the eighteenth century (Frontispiece), though advertisements referred to both short- and long-stem pipes. In the second half of the eighteenth century a few pipes were made with stems of enormous length, 2' and more (popularly termed "churchwardens," a name coined in the nineteenth century), while others

[1] Adrian Oswald: "English Clay Tobacco Pipes," *The Archaeological News Letter* (London), Vol. 3, No. 10 (April 1951), p. 153; quoting from William Harrison's *Great Chronologie* of 1588.

reverted to an earlier and more manageable size and were no more than 9" or so from heel to mouth. Boston newspapers carried advertisements offering "long London Tobacco Pipes" in 1716 and 1742, "Boxes of short Pipes" in 1761, "long and short Pipes" the next year, and "long and midling Pipes" in 1763. More helpful was the advertiser in the *Boston Gazette* (May 28, 1764) who offered his customers "glaz'd 18 inch London Pipes per Box," but whether these were considered long or extra-long remains anybody's guess.

It should be noted that as a rule the length of the stem had no bearing on the size of the bowl, but it did have a very considerable influence on the size of the hole that passed through it. This was made with a wire that was pushed down the solid stem while it was still supported in the mold. When the stem was short, a fairly large hole could be made by using a thick wire, but when the stems became longer and the wire had further to travel a thick wire was more liable to stick through the side than was a thin. In consequence, therefore, smaller wires were generally used as the stems became longer. This, at least, is the theory, though it is possible to find wires of differing thickness in use in the same period by the same maker. (*See* p. 300.) There is no denying, however, that the holes in pipe stems became smaller and smaller through the seventeenth century and on into the second half of the eighteenth, a fact first noticed by Mr. J. C. Harrington of the United States National Park Service. In September 1954, after a careful study of many thousands of pipes both in America and in England, Harrington published a chart showing the percentages of different diameters (gauged in sixty-fourths of an inch) represented among well-dated

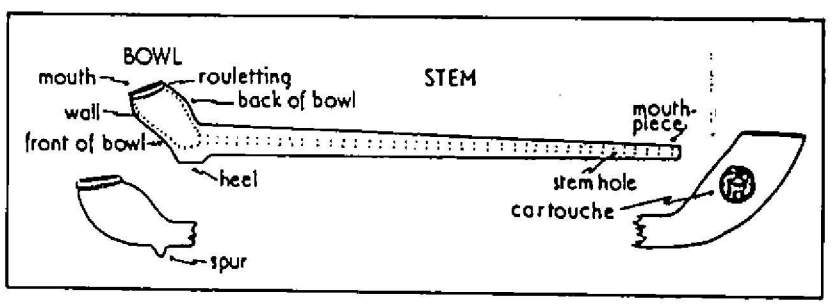


Fig. 95. The parts of a tobacco pipe.

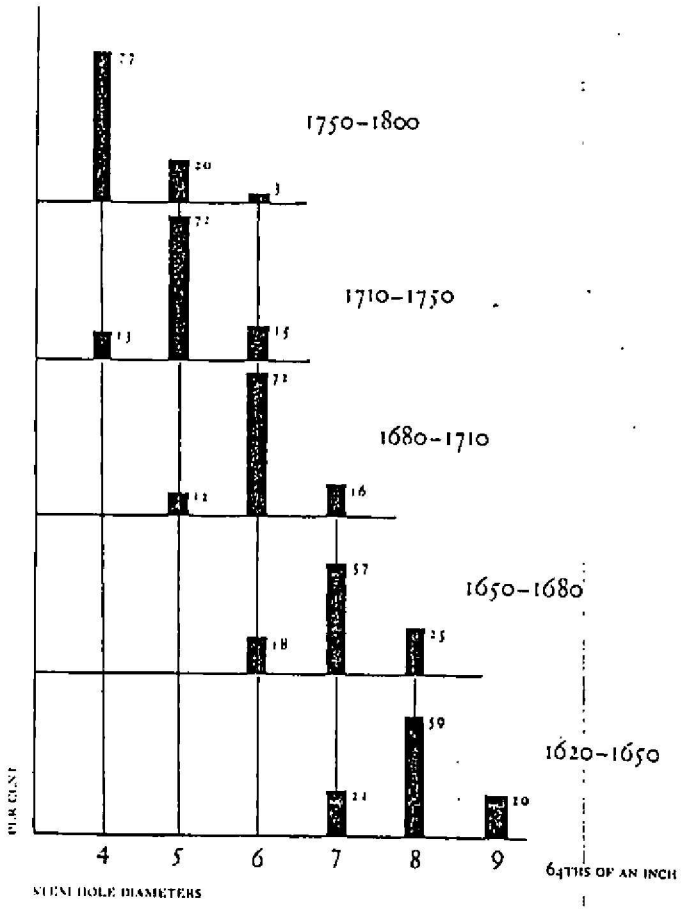


Fig. 96. Chart showing variations in hole diameters through the stems of clay tobacco pipes.

English pipes in five successive time periods from 1620 to 1800. (Fig. 96)

At first, what has come to be known as the "Harrington Theory" was received with considerable merriment among pundits of the pipe, but it soon became apparent to those who took the trouble to test the chart that there was a good deal of truth in it—though Harrington himself had made it very clear from the start that he considered the sampling too small and that much refine-

ment would be necessary when more groups of archaeologically datable pipes became available for study. He also pointed out that associations of only twenty or thirty pipes would probably be insufficient to produce an accurate answer.

So far as I know, no real effort has yet been made to redefine Harrington's date brackets, though much new information has been unearthed in the past decade. However, Dr. Lewis Binford produced a straight-line regression formula based on the Harrington chart enabling a mean date to be arrived at for any assemblage of stem fragments, be it large or small. That formula is as follows:

$$Y = 1931.85 - 38.26X$$

Y being the mean date for the group, 1931.85 the theoretical date when the stem hole would disappear altogether, 38.26 the number of years between each sixty-fourth-of-an-inch decrease, and X being the mean hole diameter for the group. This last is arrived at by first determining the diameter of the bore of each fragment (using a set of wood drills of graduated sizes), multiplying the number of fragments by the number of sixty-fourths, next adding together the total of fragments of all sizes and then all the products, and dividing one into the other, carrying the answer to three places of decimals. Thus:

Hole diameter	*Fragments*	*Product*
7/64	35 × 7 =	245
6/64	79 × 6 =	474
5/64	50 × 5 =	250
4/64	20 × 4 =	80
	184	1049 = 5.701+X

184 | 1049 (5.70)

Extremely helpful though this is, it is still based on Harrington's original chart, and the question remains as to how accurate his dates really are.

In the course of excavations in Williamsburg in the summer of 1963 a large quantity of broken pipe stems was found tramped into the ground to make a walkway, all undoubtedly laid down at the same time and most of them the products of a single maker, for

123

nearly 150 bowl fragments bore the initials RM astride the heels. There were, in all, approximately 12,000 stem fragments, and on the basis of other archaeological and historical evidence it was deduced that they were deposited in the early 1740's. Using the Binford formula and taking arbitrary samplings from the collection, the following results were obtained:

No. of Pipes	*Formula date*
19	1726.38
35	1738.09
54	1733.67
105	1733.29
129	1742.09
290	1736.59
295	1740.55
296	1738.26
383	1737.74
591	1739.79
932	1740.55
1111	1740.55
4746	1741.70
9272	1740.55
11164	1740.55

It will be seen, therefore, that although 295 fragments produced a "correct" date of 1740.55, five pieces less put it four years earlier, while one more put it two years less. It was not until 932 fragments were used that a more or less consistent answer could be relied upon. Nevertheless, the very fact that the Harrington-Binford system produced a date for the pipe fragments within ten years of that suggested by other means demonstrates its valuable contribution to historical-archaeological studies. Unfortunately, however, its range of acceptable accuracy seems to be restricted to the period c. 1680–1760, with the probability of error increasing rapidly as one moves away from that bracket in either direction. The following short list of samples from sites of various dates will serve as an illustration:

No. of fragments in deposit	*Formula date*	*Date deduced on other evidence*
90	1631	1645–53
924	1636	1645–60
300	1622	1650–60
648	1698	1690–1700
91	1709	1702–10
17	1731	1725–35
271	1751	1745–60
121	1758	1750–65
213	1767	1760–70
485	1747	1762–72
290	1753	1770–80
772	1747	1775–80
51	1755	1775–90
168	1751	1817–20

Although the large quantity of fragments needed to produce a consistent date was present in none of these instances, it is significant that within the period of reliability even quite small groups of stem fragments were capable of producing useful answers, whereas beyond it even the larger groups could provide no greater accuracy than could the small. It should be noted that the foregoing examples show the pipe-dating discrepancies falling consistently earlier than that provided by other evidence. It might be argued, of course, that even a thirty-year tolerance might be helpful in enabling the novice to get a broad idea of the era to which his site belongs, though when I ventured to make this point a lady archaeologist of my acquaintance retorted that if the excavator was unable to pin his site down to such a bracket through his knowledge of other artifacts, he had no business to be digging it.

Among the fallacies nurtured by earlier students of the pipe was the belief that the reason so many stem fragments are found is because smokers passed the pipe from mouth to mouth in the Indian fashion, each smoker breaking a piece off the stem to give himself an unsullied mouthpiece. Broadly speaking, this is nonsense. Pipes were carefully tapered so that the lips easily closed over them, and consequently the removal of more than 2" or 3" would have defeated that purpose. Furthermore, broken pipes are found

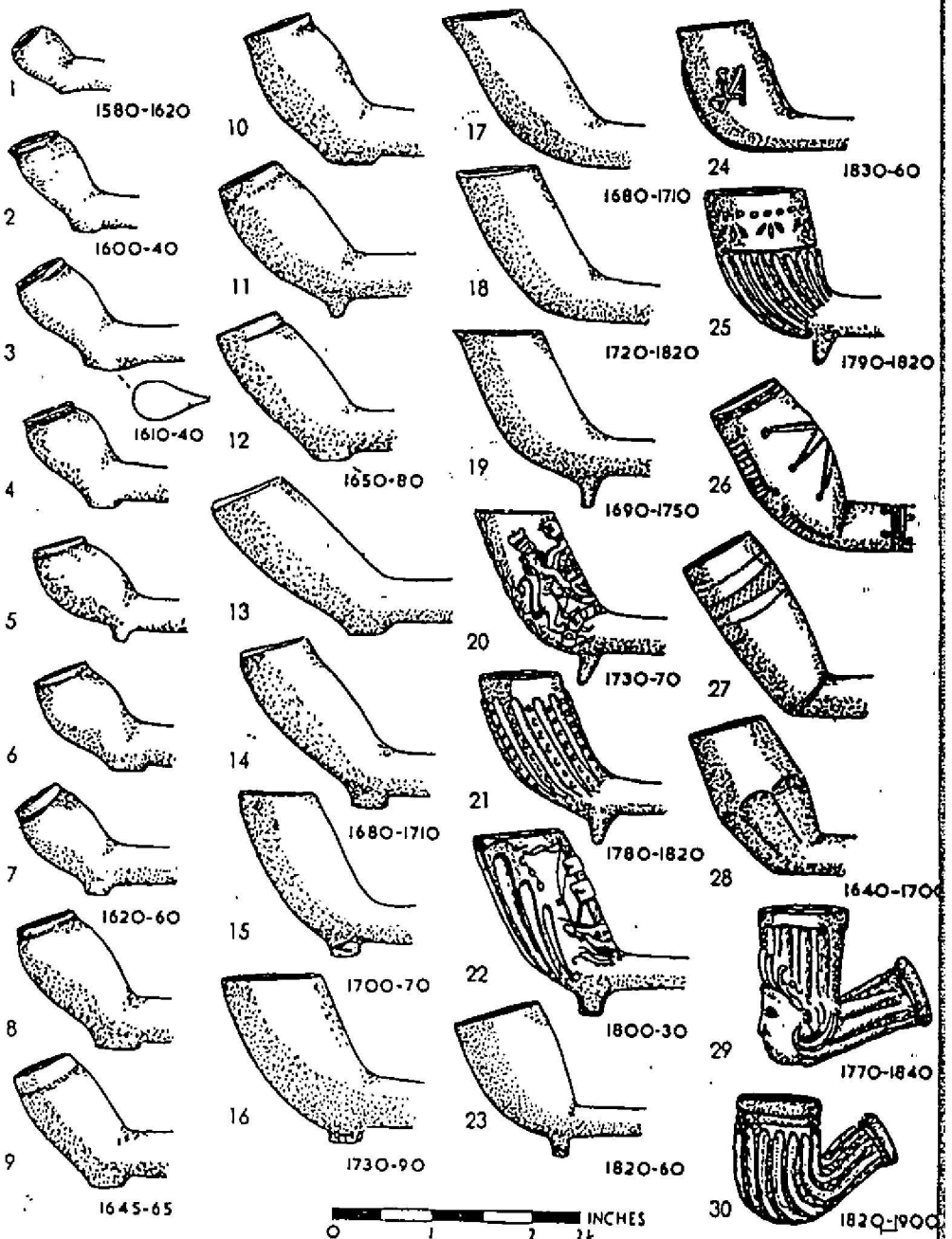
whose fractured stem has been carefully filed or ground down to shape a new mouthpiece. It is extremely unlikely, therefore, that a smoker would have been satisfied to smoke a jagged-ended, thick-mouthed pipe. The obvious explanation for the prevalence of stem fragments on colonial sites is that pipes were long and fragile, and when dropped or knocked broke into numerous pieces. With this said, however, I must note that Colonial Williamsburg owns a mid-eighteenth-century pair of steel ember tongs (*see* p. 309) having three semicircular notches on the inner faces of the arms just above the pads, which, when the tongs are closed, create three circular holes of two sizes that could well have been used to break very small pieces from the mouthpieces of clay tobacco pipes. On the other hand, the notches could be purely decorative. Before leaving the matter of mouthpieces, I should mention that some were coated with a brown or green lead glaze for a distance of about 1", while others were dipped for a similar distance into red wax—presumably having first had a plug placed in the hole. Both glazing and waxing appear to have been an eighteenth-century innovation and were by no means common.

Prior to Harrington's study of stem holes, the dating of tobacco pipes had relied on the evolution of the bowl form, and for the seventeenth century this is still the most reliable guide. However, as was demonstrated when more than 12,000 stem fragments were found together in Williamsburg, bowls are comparatively scarce, for the stem fragments were accompanied by only 800 bowls, the stem of each pipe therefore theoretically breaking into fifteen pieces.

The first study of bowl evolution (on which nearly all others have been based) was published by the English archaeologist Adrian Oswald in 1951. Figure 97 demonstrates the development of the bowl through the seventeenth into the nineteenth century in a somewhat simplified form.

The shapes were dependent on the mold makers, and each pipe-maker had his own molds. Although the forms followed the same

Fig. 97. A simplified evolutionary series of English clay tobacco pipes, plus examples of locally distributed American types. Nos. 1–24 are English; 25 and 30, American of uncertain provenance; 26–8, Virginian; 29, North Carolinian.



general evolutionary trends, it is clear that the pipes made at Chester or Broseley differed from those produced in Salisbury and that the latter were not the same as those made in Bristol—unless the manufacturers happened to buy their molds from the same maker. When one reaches the nineteenth century, decorative bowls were extremely common, and while I have illustrated three examples of styles attributable to different periods I make no pretense that they are adequately representative of the entire class.

There is, unfortunately, a great deal that we do not yet know about the so-called evolution of bowls and stems, and there is reason to suspect that present stylistic and dating criteria have been oversimplified. According to Randle Holme's *An Academie or Store House of Armory & Blazon* (c. 1682) there were then no fewer than ten pipe types, for which there were "seuerall Molds for seuerall fashions as. Lark heele pipes, Flat heele pipes, Round bolls or head, Long Bolls, Long shanks, Midle shanks, Short shanks or ends, Wrought pipes in the head and shank, Smooth pipes, [and] Gleased pipes."[8] The last two almost certainly refer to styles of finishing after removal from the mold; i.e., burnishing and glazing. It would appear that in the latter part of the seventeenth century there were three stem lengths, long, middle, and short, a revelation which casts doubt on the validity of the theory that the stem-hole wire (or "Shanking Wyer" as Holme called it) became progressivly smaller as stems grew longer. Holme's "Lark heeles" were probably what we term *spurs* (e.g., Fig. 97, No. 11), while his "Round bolls" are paralleled by my example in Figure 97, Number 10, and the "Long Bolls" by Number 12. As for the "Wrought pipes in the head and shank," they were almost certainly those with relief decoration.

In addition to the evidence of stem holes and bowl shapes, pipes may also be dated through the correct identification of makers' marks. Here again Adrian Oswald's published work provides the fullest available information. In the first half of the seventeenth century, marks were generally stamped on the flat base of the heel and took the form of initials, full names, or occasionally a rebus. In the third quarter, marks were less common, but they became plentiful again in the last quarter of the century. At this time they were normally reduced to two initials, one on either side of the heel or

[8] Holme, op. cit., p. 271; for full citation, see fn. 1, p. 37.

spur, or occasionally more fully on the back or side of the bowl in incised circles or relief-molded cartouches. These last are particularly characteristic of Bristol pipemakers. The side cartouches extended into the first quarter of the eighteenth century, but the heel-flanking initials as well as the back circles went right on through the eighteenth and nineteenth centuries. By about 1690, Bristol pipemakers were producing pipes without either heels or spurs (apparently in imitation of the traditional Indian styles) for export to the American colonies. Some of these were embossed with the makers' initials on either side of the bowl base. Although such plain bowls continued to be made until the latter years of the eighteenth century, the majority of marked examples belong to the years c. 1690–1730.

Makers' initials are also found straddling the stem, running around it as part of ornamental bands, and stamped in circles on the top—all occurring in the first half of the eighteenth century. In the second half, and on through the nineteenth century, one often finds Liverpool, Glasgow, and Irish makers' names in rectangles stamped on one side of the stem and that of the town along the other.

Stems were sometimes decorated with large, multiple, diamond-shaped fleur-de-lis stamps, a style most popular in the mid-seventeenth century. Toward the end of the century and into the early 1700's, Chester pipemakers decorated stems with bands of ornament that sometimes included spiral fluting and cartouches containing tavern signs or the arms of the City of Chester. The most striking stem decoration yet encountered comes from a mid-eighteenth-century site in Delaware where fragments of two pipes were found coated with a thin brown slip around multiple, irregular reserves exposing the white pipeclay beneath and creating a dramatic, though none-too-pleasing, polka-dot effect.

A few English pipe bowls of the seventeenth century were decorated with groups of raised dots in the shape of trees or bunches of grapes, while on rare occasions the fronts of the bowls were pinched and pared into the shape of a human face. Decorative bowls became much more common in the eighteenth century, a considerable number of them being molded with the arms of the monarch or with the crest of the Prince of Wales. Because the British royal arms appear not only on pipes, but on slipware pottery, on coins, tokens, etc., engraved on glass, and molded on iron firebacks, it may be

useful to enumerate the changes made to the royal arms in the seventeenth, eighteenth, and early nineteenth centuries.

From 1403 to 1603, when James I became king, the arms were divided into four quarters (reading from top left to bottom right) comprising the three fleur-de-lis of France in the 1st and 4th and the three lions passant guardant (leopards) in the 2nd and 3rd. From 1603 until the flight of James II, the charges of the previous arms were compressed into the 1st and 4th quarters, while the 2nd received the lion rampant of Scotland and the 3rd the harp of Ireland. With the accession of William III the arms of Nassau were added as an escutcheon on the center of the shield, these arms comprising a lion rampant with rectangular billets around it. From 1702 to 1707, until the union with Scotland, the Stuart arms were restored in the form established in 1603. But after the Union and until the death of Queen Anne, the three leopards of England shared the 1st and 4th quarters with the lion of Scotland, while the fleur-de-lis occupied the 2nd quarter and the Irish harp retained the 3rd. In 1714, with the accession of Hanoverian George I, quarters 1 to 3 remained the same, but the 4th was divided into four elements to accommodate the arms of the Electorate of Hanover. These comprised: (1) two Brunswick leopards; (2) a Luneberg lion rampant surrounded by hearts; (3) (below) a Westphalia running horse; and (4) in the center an escutcheon charged with the crown of Charlemagne. There were no further changes until 1801, when the Hanoverian arms of the 4th quarter were moved onto a central escutcheon surmounted by the Elector's cap and replaced by the three English leopards which then appeared in both the 1st and 4th quarters, the lion of Scotland ousting France from the second quarter. Another minor change occurred in 1815 when the Elector's cap was replaced by a crown in keeping with Hanover's change from electorate to kingdom. Because Queen Victoria could not succeed to the kingdom of Hanover, the Hanoverian escutcheon was removed in 1837, thus creating the simplest royal arms since the death of Elizabeth I. There have been no changes since.

The majority of armorial tobacco-pipe bowls bear the 1714–1801 Hanoverian arms, but a few have been found bearing the post-Union arms of Queen Anne. So many ornamental devices were used in the nineteenth century that it is likely (though I have not seen

one) that the Victorian arms were also used. The arms of London were frequently borrowed in that period, those being a shield charged with a cross and with the sword of St. Paul in the 1st quarter.

Pillar-molded or gadrooned bowls became popular in England and America in the late eighteenth century and continued into the nineteenth, but by mid-century English styles had become much more adventurous and the bowls were decorated with arms and crests of counties, with the insignia of Freemasonry or of the Royal Order of Buffaloes, with figures of soldiers or of ships. Sometimes the whole bowl was cast in the shape of a barrel or even a boot.

In addition to English pipes, a small number of Dutch specimens are found on eighteenth-century American sites, most of them in Florida and the Gulf States but some of them in other areas during the Revolutionary War. These Dutch pipes have somewhat egg-shaped bowls very often with evidence of vertical paring on the sides, thin walls, narrow stems, and generally highly burnished buff surfaces. Makers' marks are stamped on the backs of the bowls, on the bases of small heels, or on either side of spurs, nearly always in diminutive letters or minuscule shields of arms. Equally small pictorial marks were impressed on the bases of the small heels, among them a fish, a windmill, a milkmaid carrying two buckets, and a figure whom the Dutch describe as the "lady of easy virtue." The thin stems are often elaborately molded with fleur-de-lis, rosette, and foliate motifs, and the name GOUDA (their principal place of manufacture) is frequently included in the embossed decoration.

A few French pipes are found on early Federal sites and may be identified by the superior quality of their molded bowls, which may be shaped as faces, figureheads, or other elaborate devices. Pipes made either in the United States or for the American trade occur in large quantities in the first quarter of the nineteenth century, usually with pillar-molded or gadrooned lower bowls with broad collars above adorned by thirteen stars.

Large numbers of locally made pipes occur on Virginia sites from the second quarter to the end of the seventeenth century, some of them of great elaboration involving the use of blended clays to produce "agate" effects and employing stamps and rouletting wheels to create various impressed devices. Many of the latter are distinctly Indian in character, giving rise to the strong possibility

that they were made by the Indians and smoked by the colonists. By mid-century, cruder copies of the plain English pipes were also produced in Virginia and New England, but as no positively identified kilns have yet been found we do not know exactly where or by whom they were made. It may also be noted that very crude hand-rolled, red-clay copies of late-seventeenth-century English pipes (though with stamped ornament) are found in appropriate contexts in Jamaica. It is reasonable to suppose that the continuing exploration of early sites in others of the erstwhile British colonies will produce more evidence of local pipemaking.

Similar studies are needed in the area of nineteenth-century pipemaking in America. Until recently it was assumed that the so-called Indian-head pipes with reed stems were unknown before the early 1800's, but excavations at the Moravian settlement site at Bethabara in North Carolina have revealed similar bowl types (Fig. 97, No. 29) in a potter's waster pit dating at least as early as 1771. No doubt other such surprises are in store for us.

As well as pipes of clay, a few were of metal. There are silver examples dating from the second quarter of the seventeenth century whose stems unscrew in the middle for portability; but the majority of metal pipes belong to the latter part of the eighteenth century, when they were made of either iron or brass. They are said to have been designed for travelers and huntsmen, for whom the clay pipe was too fragile. However, the metal pipes could be painful if jolted into someone's eye, and they were not widely used. Nevertheless, fragments have been found in American excavations. In addition, the remains of a pewter pipe of uncertain date were found at Jamestown.

Supplying the smoker with fuel for his pipe proved to be one of history's most influential endeavors, and the changes wrought by it have left their mark on the world in which we live. While it would be possible to write an entire book on the artifacts, from anchors to wire, that were employed in the service of tobacco, we are here only concerned with those that kept the pipe going during the actual smoking process. Next to the weed itself, the fire was the most important accessory, coupled, of course, with a means of bringing the two together. While lighting one's pipe from a candle was probably the most convenient method (e.g., Hendrick Terbrugghen's

Boy lighting a Pipe, 1623), the embers from domestic hearths were frequently used, picked up by a pair of long steel tongs, the ends resembling those of ordinary fireplace tongs but the handles separate above a pivot with a spring between them to hold the ember-seizing pad ends together. Such tongs were used in both the seventeenth and eighteenth centuries, and some have removable tampers and even whistles as terminals. Dated examples occur from the late seventeenth to the mid-eighteenth century.

Much smaller tongs, also with spring grips, were often used, generally through the seventeenth and into the early eighteenth century. They were normally about 3¼" long and of steel or brass. The ember-seizing ends were almost pointed and together somewhat resembled the beak of a heron. The two arms were linked and pivoted in the same manner as their larger counterparts, the thicker of the two having a small spring against which the other pressed. These tools are frequently found broken, at which times the thicker of the two arms often resembles a miniature ice skate, an appearance partially derived from the flat disc at the handle end. The other handle also ended in a disc, though turning outward and intended for use as a pipe tamper. This small, and by no means rare, tool has rightly been described as a "smoker's companion," but more often than not it fails to be identified or is classed as a surgical instrument.

In the seventeenth century the embers into which the small tongs were dipped were generally contained in earthenware braziers or chafing dishes and were stood on the table. However, the same kind of burner was used as a heater for wooden foot warmers, the boxes being open, or having a door in one side and holes or slots in the top. Good examples of both types are to be seen in seventeenth-century Dutch paintings, notably Jan Miensz Molenaer's *Tavern of the Crescent Moon* (before 1668), Jan Steen's *Twelfth Night* (1688) and *Welcome for the Visitor* (before 1679), and Cornelis de Man's *The Chess Players* (before 1706). The pottery braziers were of two shapes, the most common being roughly triangular with three short legs and a single looped or cylindrical handle. These are generally of lead-glazed red earthenware, and both ware and handle types are clearly shown in two of Molenaer's paintings, the already cited *Tavern of the Crescent Moon* and *Peas-*

ants in the Tavern. The second and more elaborate type of brazier comprised a bowl with a slotted or punctured bottom over a hollow pedestal foot, the latter generally having a triangular aperture in the side to encourage an upward draft. One such foot in "Metropolitan" slipware was found at Jamestown and, being decorated, was clearly not intended to be hidden in a foot warmer. Smokers' braziers were also made in more expensive and ornamental materials, such as brass and even silver gilt. An example of this chafing dish type is shown in Willem Pietersz Buytewech's *A Merry Party* (about 1615). Small sheet-brass braziers with a turned wooden handle attached to one side were common in the eighteenth century. They generally stood on a cast-brass collarlike foot, made in at least two sections and decorated with patterns of circular holes and crescents. Parts of these feet are found on American archaeological sites of the mid-eighteenth century—and are generally classed as *unidentified*.

Next to the means of lighting his pipe, the smoker's most important tool was the tamper or stopper. These were commonly of brass, and from at least as early as 1660 they were cast with elaborately ornamental handles. (Fig. 98) Close dating is not always as easy as it looks, for the designs were frequently retrospective; for example, a profile of Charles I would have been popular in the reign of Charles II, while a coin mounted on the handle might already have been old (and therefore interesting) when it was so used. The best clue to an early date is provided by the size of the tamper itself, for those that were of small diameter (Fig. 98, No. 1) fitted small bowls—and small bowls were generally early. A sophisticated type appeared in the early eighteenth century (and continued through it) in the form of a closed-ended tube topped by a signet ring; the tube served both as a tamper and as a case for a pocket corkscrew attached to the ring handle.

Sometimes mistaken for a corkscrew is another smoker's aid, this one in the shape of a miniature steel hatchet. Attached to the handle end was a double "corkscrew" resembling the "worm" for extracting debris from gun barrels; it served a comparable purpose in extracting plugged tobacco from pipe bowls. At the other end of the tool was a small blade with an unsharpened edge to break up tobacco without cutting it, while behind, at what might be termed

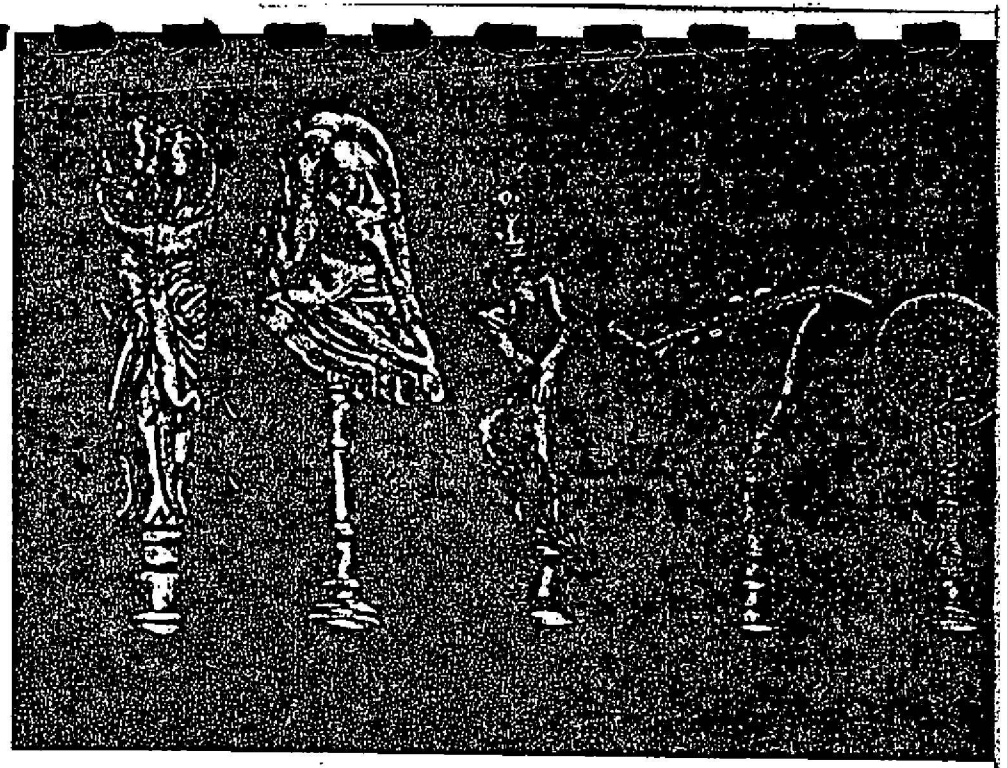


Fig. 98. Brass pipe tampers. 1. Amorous couple; third quarter of 17th century. 2. Profile of Charles I; late 17th or 18th century. 3. Nude boy; 17th or 18th century. 4. Hand with pipe, probably early 19th century. 5. Handle in the shape of a Queen Anne coin; early 18th century (?). Ht. of No. 1: 3".

the poll of the hatchet, was a round-sectioned tamper sometimes decorated with multiple collars and grooves. The small diameter of the tampers suggest that these tools may date from the seventeenth rather than the eighteenth century, but unfortunately I know of no examples from dated archaeological contexts.

Tobacco boxes fall into two classes, those used to carry it around on one's person and those to keep it in the home. Pocket boxes are sometimes impossible to distinguish from large snuffboxes, and cheap varieties of both were made of tin, pewter, and brass. Copper boxes with brass lids having stamped and engraved decoration were made in the Netherlands throughout much of the eighteenth century and are identified by the presence of Dutch inscriptions describing designs of ships, harbors, towns, and convivial or Biblical scenes. The majority of such boxes were oblong, but the earliest examples seem to have been oval with both top and bottom of brass. (Frontispiece)

Nonportable tobacco boxes used in the home and in taverns or other public buildings were most commonly of lead, usually with poorly defined cast decoration (tavern scenes, shields of arms, etc.) on the sides; they had removable lids and a press inside to keep the tobacco tight and away from the air. These boxes were often gaily painted, particularly in the early nineteenth century. The archaeologist who finds scraps of lead with molded, paneled ornament would do well to consider the possibility of its having been part of a tobacco box. They were also made in iron, brass, and pewter. In the nineteenth century brown stoneware jars with flat lids were widely used, some of the more elaborately decorated jars coming from the Rhenish potteries of Nassau in the Rhineland as part of their Gothic revival.

Although clay tobacco pipes were relatively cheap, tavern keepers who provided them for their customers were wont to re-use them as long as they remained unbroken. In the interests of hygiene they baked used pipes in what were known as "kilns," iron racks comprising three hoops held together by horizontal straps and with a suspension ring in the mid-section of the second hoop. Slung in this rack, the pipes were baked over the kitchen fire or sealed in the bread oven. Iron feet in the form of bent lengths of strapping were usually attached to the bottom horizontal strap so that once cleansed, the pipes and rack could be stood beside the hearth to cool. Thus skeletal iron tubes found in excavations may well have been pipe "kilns." It is worth remembering that such items listed in household inventories do not necessarily mean that the owners manufactured pipes!

Binford, Lewis R.: "A New Method of Calculating Dates from Kaolin Pipe Stem Fragments," *Southeastern Archaeological Conference Newsletter* (Cambridge, Mass.), Vol. 9, No. 1 (June 1962), pp. 19–21.

Harrington, J. C.: "Dating Stem Fragments of Seventeenth and Eighteenth Century Clay Tobacco Pipes," *Quarterly Bulletin* of the Archeological Society of Virginia (Richmond), Vol. 9, No. 1 (September 1954).

Lindsay, J. Seymour: *Iron and Brass Implements of the English and American House*. Rev. edn. London, 1964.

Mojzer, Miklos: *Dutch Genre Paintings in Hungarian Museums*. English edn. Budapest, 1967.

Noël Hume, Audrey: "Clay Tobacco Pipe Dating in the Light of Recent Excavations," *Quarterly Bulletin* of the Archeological Society of Virginia (Richmond), Vol. 18, No. 2 (December 1963), pp. 22–5.

Oswald, Adrian: "English Clay Tobacco Pipes," *The Archaeological News Letter* (London), Vol. 3, No. 10 (April 1951), pp. 154–9.

———: "The Archaeology and Economic History of English Clay Tobacco Pipes," *Journal of the Archaeological Association* (London), 3rd Ser., Vol. 23 (1960), pp. 40–102.

———: "The Evolution and Chronology of English Clay Tobacco Pipes," *The Archaeological News Letter* (London), Vol. 7, No. 3 (September 1961), pp. 55–62.

Pawson, Michael: "Clay Tobacco Pipes in the Knowles Collection," *Quarterly Bulletin* of the Archeological Society of Virginia (Richmond), Vol. 23, No. 3 (March 1969), pp. 115–47.

Appendix 3: Gilbertson's and Barto's Data on Title Transfers, Inhabitants, and Building Usage of the Voorlezer House Property

HISTORIC STRUCTURE FACT SHEET (V) - 1

CHRONOLOGY: CHAIN OF TITLE (PROPERTY OWNERSHIP)

Date	Deed/ Mortgage/ Will	Liber/ Page	Grantor / Mortgagor	Grantee / Mortgagee	Acreage	Price/ Value
12/30/1680	Patent	Patent Book # 5/ 28	Sir Edmund Andros	Robert Rider	320 acres 37 acres meadow	
Issued 7/18/1681	L of A	NYHS Wills v. 1, p. 109	Robert Rider	Cornelius Hendrichsen - his creditors Abraham Corbett James Matthews		
9/6/1686	D	B/33	Abraham Corbett Excrs. of James Matthews & Cornelius Steenwirt	Anthony Fountain	320 acres 37 acres meadow	
by 6/29/1696	Will[1]		Anthony Fountain	Vincent Fountain		
6/29/1696	D	B/260	Vincent Fountain	James Hance Dye	160 Acres[2] 18½ acres meadow	£44
7/5/1696	M	B/250	James Hance Dye	Vincent Fountain	"	£32.10
7/7/1696	D	B/262	James Hance & Mary Dye	James Fitchett	80 acres[3]	competent sum
3/6/1697	Lease	B/340	James Hance Dye James Fitchett	Dutch Congregation	271' for 50 years[4]	freely given
9/20/1697	M	B/259	James Fitchett	Hanse Lawrence Dye	80 acres 9½ acres salt meadow	£25.13[5]
1/13/1698	D	B/319	James & Sara Fitchett	Thomas Coone	" 6	£50
3/6/1700/01	Lease	B/390	Barent Tyse & Teunis Egbertse w/ consent of Dutch Cong.	Louis DuBois[7]	remainder of lease to Dutch Congregation	
			?	?		
5/18/1702	D	B/522	Hans & Sara Lawrence[8]	William Die	80 79 acres 9½ acres salt meadow	competent sum

Prepared by: EG
Date: 1/81

CHRONOLOGY: CHAIN OF TITLE (PROPERTY OWNERSHIP)

Date	Deed/ Mortgage Will	Liber/ Page	Grantor / Mortgagor	Grantee / Mortgagee	Acreage	Price/ Value
2/21/1702/03	D	B/435	William Hance	John Androvat	79 acres 9½ acres salt meadow	competent sum
11/9/1705	D	B/523	John & Jane Androvat	Rene Rezeau	"	£146
proved 10/3/1720	Will	NYHS Wills v. 2, p. 225	Rene Rezeau	Peter Rezeau	½ of plantation at Fresh Kills	
proved 10/8/1723	Will	NYHS Wills v. 2, p. 274	Peter Rezeau (father)[9]	Peter, Jacob, James Rezeau (sons)		
proved 11/19/1733	Will	NYHS Wills v. 3, p. 130	Peter Rezeau (son)[10]	Jacob & James Rezeau (brothers)		
1/ /1746	D	unrecorded[11]	James Rezeau	Jacob Rezeau	79 acres	
8/2/1786	M	Loan Commissioners Book # 22	Jacob Rezeau	Loan Commissioners	"	£100
proved 10/30/1789	Will	File P-10	Jacob Rezeau	Richard Johnson, and his children (Susannah & Rezeau)	lot of land where R.J. now dwells	
5/1/1793	D	378/336	Excrs. of Jacob Rezeau[12]	Rezeau Johnson and John A. & Susannah Van Pelt[13]	48 acres	£100
7/1/1793	M	(M) B/417	Rezeau Johnson	John A. Van Pelt	"	£92
7/12/1816	M	(M) D/191	John A. Van Pelt	Sarah Barns	"	$250
d. 3/5/1826			John A. Van Pelt[14]	Susannah (widow), Cavalier (son) Harriet Wheately (gr. dau.)		
issued 11/12/1855	L of A	File A-703	Cavalier R. Van Pelt	Susannah Van Pelt Harriet Wheately		

Prepared by: EC
Date: 1/83

CHRONOLOGY: CHAIN OF TITLE (PROPERTY OWNERSHIP)

Date	Deed/ Mortgage/ Will	Liber/ Page	Grantor / Mortgagor	Grantee / Mortgagee	Acreage	Price/ Value
Issued 9/14/1871	L of A	File A-1210	Susannah Van Pelt	Harriet Wheately		
10/22/1872	D	99/309	Harriet Wheately	Martin Mooney	Parcel 1	$750
3/29/1873	D	101/327	Martin Mooney	Mary Mooney	Parcel 1 & 2[15] (see chain of title for Parcel 2 below)	$1
3/29/1873	D	101/329	Mary Mooney	Catherine Mooney	Parcel 1 & 2	$1
12/18/1883	D	150/510	Catherine & Martin Mooney	Solomon Rosenberg	"	$800
6/5/1891	D	210/305	Solomon Rosenberg	Amalia Rosenberg	"	$1
6/16/1924	D	585/86	Amalia Rosenberg	Sam Cohen	"	
6/17/1924	M	(M) 442/231	Sam Cohen	Amalia Rosenberg	"	$4500
9/11/1924	D	584/449	Sam Cohen & wife	Marie Peterson	"	$100 Subject to mtg.
9/12/1924	M	(M) 445/145	Marie Peterson	Sam Cohen	"	$3000
10/28/1927	M	(M) 567/26	Marie Peterson	Richmond Co. Bldg. & Mutual Loan Association	"	$5000
10-22-1936	D	789/225	Herbert Ginzburg, referee	Richmond Co. Federal Savings and Loan Association	"	$500
1/10/1939	Agreement	at SIHS	Richmond Co. Federal Savings & Loan Association	Marie Alice Kennedy	"	$1000
1/17/1939	D	812/592	"	"	"	$10
1/19/1939	D	812/587	Marie Alice Kennedy	Staten Island Historical Society, Inc.	"	$1

CHRONOLOGY: CHAIN OF TITLE (PROPERTY OWNERSHIP)

Date	Deed/ Mortgage/ Will	Liber/ Page	Grantor / Mortgagor	Grantee / Mortgagee	Acreage	Price/ Value
PARCEL 2	(small lot to north of lot Voorlezer House stands on)					
			???	???		
	M	unrecorded	John Crocheron[16]	John A. Van Pelt, Esq.	Parcel 2	
	D	unrecorded	John Crocheron[17]	John Morgan, Jr.		
7/27/1819	D	K/17	John & Elsie Morgan	Sarah Barnes[18]		$400
7/15/1819	Bond	K/65	John Crocheron[19]	Sarah Barnes		$500
3/29/1864	L of A	File A-928	Sarah Barnes Wood[20]	John Lake, Catherine Egbert, Mary Ann Egbert, Joseph Lake, Daniel Lake[21]		
3/1868	D	74/284	John & Mary Lake, Mary Ann & William Egbert, Catherine & Cornelius Egbert, Daniel Lake	Martin Mooney		$500

Joined with Parcel 1 on 3/29/1873 (see Liber 101/327)

1. Part of this chain of title found in Edward C. Delavan, Jr., "The Guyon House," SIAAS Proceedings 6 (Feb. 1916): 137 and Lefferd M.A. Haughwout, "The Voorlezer's House at Richmond: The Documentary Evidence," in Sources. This has been added to and corrected where necessary. It is noted in the deed from Vincent Fountain to Bye that Vincent was the heir and executor of his father, Anthony Fountain, "lately deceased." There seem to be no will or letters of administration.

2. The northern half of the Rider Patent.

3. The north-east quarter of the Rider Patent. The boundary description begins " at a flat rock below the forelezer's house." This is the first known reference to the house.

4. This parcel of land at the Fresh Kill was 87'(E) x 81'(S) x 63'(W) x 60'(N). The land was to be "inhabited by no other as by ye person that serves ye said Congregation." This person was to have the privilege of firewood, and if "ye said person shall teach both English and Dutch, Fitchett's children were to have free schooling. This land was part of Fitchett's 80 acre Rider Patent parcel.

CHRONOLOGY: CHAIN OF TITLE (PROPERTY OWNERSHIP)

Date	Deed/ Mortgage Will	Liber/ Page	Grantor / Mortgagor	Grantee / Mortgagee	Acreage	Price/ Value

5. Satisfied 1/14/1699.

6. Boundary description the same as in B/262.

7. Makes over to Du Bois "one house att the head of the Fresh Kills, and the plancks thereunto belonging which formerly was built for the Dutch Congregation."

8. It is not known how Hans Lawrence gained title to the 80 acres. On 2/29/1699, Lawrence sold one acre, which was pa of the 80 acre plot, to Thomas Coone. Delavan speculated that Lawrence took back Fitchett's 80 acres under the mortgag he held, but this mortgage was satisfied. Perhaps Coone sold the 80 acres to Lawrence and then bought back the 1 acre lot. In later deeds to the 80 acres, this 1 acre lot is always excluded.

9. Bequeathed to them was "all my estate and plantation, and all tenements thereto belonging, to be equally divided between them from front to rear."

10. Peter's son Peter died between 9/29/1733 and 11/19/1733. His lands were to be divided equally between his 2 brothe

11. At SIHS. Copy in Documents-Historic.

12. Peter Rezeau, Peter Winant, Anthony Van Pelt. Jacob's estate was divided between his two daughters: the wife of Richard Johnson and the wife of Peter Winant. Johnson received the eastern 48 acres, excluding the 1 acre lot and small plot deeded by Jacob to the Dutch Congregation in 1769. Winant recieved the western 30 acres. See Liber S/323.

13. Susannah married John A. Van Pelt by 1792. Their first child, Catherine, was baptised 8/17/1792 in the Reformed Dutch Church at Port Richmond. Vosburgh, Reformed Church in Port Richmond Records, v. 2, p. 4.

14. Will or letters of administration not recorded in Richmond County.

15. Parcel 2 is very small lot to north of lot the house stands on. It has a house on it as early as before 1819.

16. This mortgage is referred to in K/65 (3/15/1819), but is not recorded.

17. This also is referred to in K/65 but not recorded.

18. Widow of Roger Barnes, who died 6/27/1815.

19. Crocheron had not paid off his mortgage to Van Pelt before he sold the property to Morgan. This bond frees Barnes from any obligation toward the mortgage.

20. Married Richard Webb Wood (b. 6/2/1787, d. 7/16/1845). She died 1/25/1864.

21. Children of her late brother, Bornt Lake.

CHRONOLOGY: INHABITANTS / BUILDING USAGE

Date	Name(s)	Occupation	Possible Use	Source/Reference
c.1695-1701?	Hendrick Kroesen	Voorlezer	Church/School/ Residence	L.McMillen, "The Voorlezer," Historian, v.8,n.3 (July 1946) in Reports on Bldg. & Occupant
1701- ?	Louis DuBois ???	Blacksmith	Residence?	Lease, B/390, 3/6/1700/01. Note 1.
1705-1720	Rene Rezeau (-c. 1720) Anne (Coursier) Rezeau	Mason/Farmer	Residence	Deed, B/523, 11/9/1705 (Bricklayer of N.Y.C.) Will, NYHS Wills,v.2, pp.225-3 proved 10/3/1720.
? -1723	Peter Rezeau (-1723)	Mason/Farmer	Residence	Will, NYHS Wills, v.2,pp.274-7 proved 10/8/1723.[2]
1723-1733?	Jacob Rezeau (-c. 1789) ??? James Rezeau ??? Peter Rezeau (-c. 1733) ???	Cooper Turner	Residence	Will, NYHS Wills, v.3, p. 130, proved 11/19/1733.[2] Unrecorded Deed, 1/1746, in Documents-Historic.[2]

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CHRONOLOGY: INHABITANTS / BUILDING USAGE

Date	Name(s)	Occupation	Possible Use	Source/Reference
1733-1746?	Jacob Rezeau (-c. 1789) ??? James Rezeau ( ) ???			See above.
1746-c.1786?	Jacob Rezeau	Cooper/Yeoman	Residence	"I.R. 1769" stone in N.wall, cited in The Story of the "Voorlezer's House, 1947, SIHS Hist Pamphlet #2, in Reports re: Bldg. & Occupants.[2] Deed, E/64, 5/1/1769 (yeoman)
1786	???	Clerk	Clerk's House	Mtg., Loan Commissioner's Book # 22, 8/2/1786.
by 1786-c.1793	Richard Johnson (-1819) Susannah Johnson (dau.) Rezeau Johnson (son)	?	Residence	Will of Jacob Rezeau, File P-1 made 3/14/1786. 1790 Census, Southfield.
by 1793-1826	John A. Van Pelt (1759-1826) Susannah (Johnson) Van Pelt (1763-1863)	Cooper Farmer by 1820	Residence	Deed, 378/336, 5/1/1793. Mtg., (M)B/417, 7/1/1793. 1800 Census, Southfield. 1810 Census, Southfield. Mtg. (M)D/191, 7/20/1816 (Esq. 1820 Census, Southfield, p. 3.
c.1793-1819	Richard Johnson (-1819)			
c.1793- ?	Rezeau Johnson			
1826-1854	Cavalier R. Van Pelt (c. 1791-1854) (son of John) Susannah Van Pelt (widow) Harriet Wheately	Farmer	Residence	1830 Census, Southfield, p. 14 1835 Census, Southfield, p. 4 1840 Census, Southfield, in Infr. and t[illegible]. 1850 Census, Southfield, dwell. # 86, fam. # 88.

CHRONOLOGY: INHABITANTS / BUILDING USAGE

Date	Name(s)	Occupation	Possible Use	Source/Reference
	Cavalier Van Pelt (cont.)			L of A, File A-703, issued 11/12/1855.
1854-1863	Susannah Van Pelt (c.1763-1863) Harriet Wheately (c. 1820-)		Residence	1855 Census, Southfield, dwell. # , fam. # 44. 1860 Census, Southfield, dwell. # 345, fam. # 370.
1863-1872	???			1865 Census, not conclusive.[3] 1870 Census, not conclusive.[3]
1872-c.1879	Martin Mooney (1825-) Catherine Mooney (1826-)	Farm laborer	Residence	Deed, 99/309, 10/22/1872. 1875 Census, Southfield, dwell. # 131, fam. # 131. See also note 3.
c.1880-1893	Solomon Rosenberg (1853-c.1933)[7] Amalie (Molly) Rosenberg (1854-c.1933)[7]	Dry Goods Merchant	Residence/Store	1880 Census, Southfield,[4] dwell. # 70, fam. # 70. Deed, 150/510, 12/18/1883. R.C. Standard, 2/23/1883, in Documents-Historic.[5] 1892-93 Webb's Directory.

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CHRONOLOGY: INHABITANTS / BUILDING USAGE

Date	Name(s)	Occupation	Possible Use	Source/Reference
1893-c.1910	Solomon Rosenberg	Hotel-Saloon Keeper	Residence/ "Arlington Hotel"	1893-94,1895-96,1897-98 Standard Directories. 1898,1899 Trow's Directories. 1900 Census, ED 607, dwell. # 234, fam. # 242. 1903, 1906 Standard Directories
c.1910-1924?	Solomon Rosenberg Samuel Rosenberg (son?)	Retired Hotel-Saloon Keeper	Residence Residence/Hotel	1910 Census, 1911,1912,1914 Richmond Borough Business Directories.[6] 1915 Census,
				1924 Oleck's Classified SI Phone Deed, 585/86, 6/17/1924. SI Advance, 1/6/1937, in Newsclippings.[7]
1925-1938	Nicholas George	Restauranteur	Residence/ Restaurant ("Confectionary")	1925 Census, Summer 1927 SI Phone Directory Winter 1927-28 SI Phone Dir. Summer 1928 SI Phone Directory Winter 1928-29 SI Phone Dir. Summer 1929 SI Phone Directory Winter 1930-31 SI Phone Dir. Winter 1932-33 SI Phone Dir. Summer 1934 SI Phone Directory
				1933-34 Polk's SI Directory.[9]

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CHRONOLOGY: INHABITANTS/BUILDING USE

Date	Name(s)	Occupation	Possible Use	Source/Reference
1933-1936	Nicholas George	Restauranteur/ Tavern Keeper	Residence/ Restaurant/Tavern "Acorn Inn"[10]	1932 Photo ( ) by L.McMille in Photos-Historic. 11/1935 Photo ( ) by Sykes- Front, in Photos-Historic. 12/20/1936 Photo by Sperr (Sp. Neg.#R137)( ) in Photos-H Deed, 789/225,10/22/1936, in Current Title Information.[10]
1936-mid 1938	Unoccupied			Note 11.
mid 1938-1942	Staten Island Historical Society	Under restoration		Note 11. Note 12. W.McMillen, "An Analysis and Report on the Voorlezer's Hous in Its Present State-Jan 1977. in Planning & Progress Reports
1942-1980	Staten Island Historical Society		Historic House	SI Advance, 4/15/1942, in Clippings & Ephemera (2).[13] SI Advance, 4/15/1942, in Clippings & Ephemera (3).[13] NY Times, 5/24/1947, in Clippi & Ephemera (3).[13] "Historic Richmond Day," progr 5/23/1947, in Clippings & Ephe
1980-present	Staten Island Historical Society	Under restoration		Memo, T. Kinneri to B. McMahon 3/24/1980, in Planning & Progress Reports.[14]

1. In "The Voorlezer," (Historian, v.8,n.3, July 1946, p. 18), Loring McMillen states that Thomas Coone, County Clerk, was sold the house in 1701 and that he "evidently used it for his home and office." Coone was sold the 80 [illegible]es (which the Voorlezer House plot came from) in Deed B/319, but in 1698, not 1701. In 1701, the Dutch Church le[illegible] the house plot to DuBois, who presumably used it to live in. There seems to be no specific documentation for McMi[illegible]n's statement about Coone owning the house. See Chronology: Chain of Title, notes 6,7, & 8.

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CHRONOLOGY: INHABITANTS / BUILDING USAGE

Date	Name(s)	Occupation	Possible Use	Source/Reference

2. The three Rezeau brothers inherited their father's property, which was to be divided equally. It is not known if any of them ever lived in the house. When Peter died in 1733, he left James and Jacob his share of their father's property. Jacob and James apparently held the 80 acres in common from 1733 to 1746 when in January 1746, James sold his interest in the property to Jacob (unrecorded deed). It is possible that the "Colonial Home of the Rezeau Family" shown on the 1937 SIHS Pamphlet, "The Historic Village of Richmond and Vicinity," (Box 116ar, SIHS Archives) may have been on the 80 acres held in common by the brothers. Perhaps one brother lived in that house and the other in the Voorlezer's House. This is only speculative since at present there is no documentary evidence for the exact location or age of this second Rezeau house. After 1746, when Jacob had sole title to the 80 acres, he might have been living in this second Rezeau house (depending on when it was built) or in the Voorlezer's house. There is no more specific evidence for where he lived other than his title to the property. In the north wall of the foundation of the Voorlezer's House is a stone marked "IR 1769.". Was Jacob living in the house then? Were other family members living in it in the 1760s and 1770s? There is evidence that Rezeau's son-in-law Richard Johnson, who married his daughter Wyntje in 1762 (N.Y. Marriages, p. 206), was living there in 1786 (Will of Jacob Rezeau, File P-10, made 3/14/1786).

3. Either Harriet Wheately or Martin Mooney probably lived in the Voorlezer's House between 1863 and 1872. Mooney probably did not live there until 1872. He bought the Sarah Wood House on the lot just to the north of the Voorlezer's House (Parcel 2) in 1868 (Deed 74/284). His position in the 1865 and 1870 censuses places him in Richmondtown, probably in the Sarah Wood House. Sarah Wood, who had been living in the house in 1861 (R.C. Gazette, 1/2/1861, in Documents-Historic) died before 1/29/1864. Her heirs owned the house in 1865. Perhaps Mooney rented the house in that year, and then bought it in 1868. In August 1872, an article in the R.C. Gazette noted that the dwelling house of Martin Mooney in Richmond burned down. The description of the location seems to indicate that this was the former Sarah Wood House (R.C. Gazette, 8/21/1872, in Documents-Historic). Two months after this fire, in October 1872, Mooney bought the Voorlezer House (Parcel 1) from Harriet Wheately (See Chronology: Chain of Title).

Wheately could have been living in the Voorlezer's House after Susannah Van Pelt's death in 1863, although she does not appear to be in the Richmondtown area in the 1865 Census. In the 1870 Census, she is living with the Heyer family (dwell. # 73, fam. # 72 in Southfield) in or near Richmondtown. It is not known which house this might be. (See Original Schedule 1870 Census, Richmondtown--Position of Wheately and Mooney, in Documents-Historic).

4. Mooney's position in the 1880 Census indicates that he moved out of the Voorlezer's House before selling it to Rosenberg in 1883. The census shows that Rosenberg was in the house (renting from Mooney most likely).

5. This newspaper item refers to the construction of an addition built on the north side of the original building. The addition was the main store and hotel-saloon section, and the original house was the residence. See photographs cited in note 10. The exact arrangement between the two sections through the period 1883 to 1936 is not known in detail. This section was torn down in 1938 when the Voorlezer's House was being restored (1938-1942).

6. In the 1911 and 1914 directories, the proprietor of the hotel is simply listed as S. Rosenberg. In the 1912 Richmond Borough Directory, Solomon Rosenberg is noted as being retired and Samuel Rosenberg is noted as running the hotel (listed as "cafe"). Samuel may be Solomon's son or perhaps another relative. Solomon probably retired from acti running the hotel-saloon c. 1910. Presumably he lived in the Voorlezer's house until the building was sold in 1924 to Sam Cohen (Deed 585/86, 6/17/1924). Between 1893 and 1914 the business is listed variously as a hotel, tavern or retail

CHRONOLOGY: INHABITANTS / BUILDING USAGE

Date	Name(s)	Occupation	Possible Use	Source/Reference

6. (cont.) liquor outlet. After Prohibition in 1920 there are, of course, no listings for taverns. The next known listing after 1919 is in 1924 where the business is listed as a hotel. That is the last known listing of the place under Rosenberg's ownership.
7. This news article gives the approximate death dates of Solomon and Molly Rosenberg. Their birthdates come from the 1900 Census.
8. The SI Phone Directories, 1927-1934, all list Nicholas George's business as a confectionary.
9. The directory lists George as a restauranteur, who both lived and carried on his business in the building.
10. The first evidence for the name "Acorn Inn" is the 1932 McMillen photo. In this photo, the sign above the entrance to the 1883 addition reads "Acorn Inn--Restaurant" and has two glasses of a frosty beverage which certainly can only be beer. In 1932 restaurants could only openly serve "near beer," so if the photo is correctly dated (1932) one wonders what Nicholas George was serving in his restaurant! (Prohibition was officially repealed in March 1933). After Prohibition was repealed George probably went back to selling alcoholic beverages. Other signs in the 1932 photo show that a wide range of items were sold at the Acorn Inn: hot franks, ice cream, bread, cake, groceries, notions and tobacco products. The 11/1935 Sykes photo shows that the building is shingled. Most of the signs advertising the sundry items are gone, although the main "Acorn Inn" sign remains. A neon sign advertising Ebling Beer has been added in the window of the tavern. In the mortgage foreclose and referee deed by the Richmond County Savings and Loan Association, the Ebling Brewing Company, Marie Peterson, Nicholas and the Pierce Butler Radiator Corporation are all cited as defendants. With the foreclosure, the tavern probably went out of business (sometime in October-November of 1936). The 12/20/1936 photo by Sperr shows the building boarded up with only the public telephone signs remaining on the tavern.
11. By 9/1936, the Historical Society had discovered that the original part of this building was the house of the voorlezer (Historian, v.2,n.1, Jan. 1939, p. 4). Rev. Leffret Haughwout, the minister of St. Andrews, and Loring McMillen prepared research reports on the documentary history and physical history, respectively, which they presented to the Society on 2/22/1937 (both in Sources). McMillen's report, written before the Society took title to the house, is based on a complete study of the building. Interior photographs dated late 1936 through early 1937 show that the Society had access to the building before they had title to the property. The Richmond Co. Fed. Savings & Loan Assoc. had entrusted partial care of the property to the Society with the understanding that the Society would gain title to it eventually (Letter, C. Gordy to L. McMillen, 11/17/1937, in Admin.-Correspondence). In December 1936 the Society approached Borough President Palma with the idea of asking the City of New York to buy and restore the house. These appeals to Palma continued unsuccessfully through November 1938 (Letter, L. McMillen to J. Palma, 12/7/1936; and Letter, J. Palma to L. McMillen, 11/16/1938, both in Admin.-Correspondence). Between July and September 1938, the Society had worked out an arrangement with the bank whereby the Society could begin restoration of the building, partially at the Society's expense and partially at the bank's expense, in hopes of further enticing the City of New York to buy the house. The first step, demolishing the 1883 tavern section, had already begun by September 1938 (Letter, C. Gordy to L. McMillen, 7/26/1938; and Letter, L. McMillen to C. Gordy, 9/26/1938, both in Admin.-Correspondence). The demolition was completed before December 1938 (12/1938 Photo ( ) by Pingado, in Photos-Architectural).

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CHRONOLOGY: INHABITANTS /, BUILDING USAGE

Date	Name(s)	Occupation	Possible Use	Source/Reference

12. The bank still held title to the building when the r[illegible]ation work was begun. Mrs. T. Livingston Kennedy then bought the building from the bank and gave it to the [illegible]HS. Her decision to make this gift was announced at a Society Board Meeting on 1/5/1939 (Letter, SIHS to Mrs. T.L. Kennedy, 1/6/1939, in Current Title Information. See also Chronology: Chain of Title).
13. The major restoration of the building was completed in time to open the house as part of the activity for the N.Y.C School Board's 100th centennial on 4/14/1942. It was formally dedicated on "Historic Richmond Day," 5/23/1947.
14. The building was closed completely later in 1980. The memo only refers to the partial closing of the upper floors.

Prepared by: S[illegible]C
Date: 4/83

Appendix 4: Faunal Reports by Kate T. Morgan

4a: Procedures and Problems of Analysing Archaeological Faunal Remains

4b: Butchery Practices

4c: Voorlezer House Faunal Study

4d: An analysis of the proportions of bone to shell remains unearthed at the Voorlezer House

Appendix 4 : a

PROCEDURES AND PROBLEMS OF ANALYSING ARCHAEOLOGICAL FAUNAL REMAINS

Kate T. Morgan

Introduction

One can see, after looking at the Flow Chart (Fig. 1), that the archaeological process is a series of translations. Bone as matter is eventually transcribed into data on tabulation cards (or sheets); from these tabulations results a set of graphs and pictorializations which attempts to organize faunal remains in ways that will highlight recurrence and anomaly. Comparison between expected patterns and patterns that are observed from the archaeological record can begin to reconstruct 18th and 19th century foodways at the Voorlezer House. Hopefully, broader traditions can be identified, for example, the relationship of market to household through time and more general overviews about regional food patterns and customs.

The following discussion is a series of explanations addressing this last stage of translation by juxtaposing the data to any possible context in which patterns can be observed. Initial and general questions that can be asked

are:

1) What is the species? How many? How many other species are present?
2) What part of the anatomy does the bone come from? What is the condition of the bone. Is it naturally broken? Is it butchered and how is it butchered? Is it burned, worn, gnawed, pathological etc.?
3) Where are the bones being found? In the back-yard, house or in some other feature? Why? Is there a time period associated with the bones that have been deposited and consequently excavated?
4) What inferences can be made? What was being done to the bones before they were deposited in the ground? And finally, what happened to the bones once they were placed in the ground: have they been moved or carried away? Have they been chewed, re-used etc.?

All the above questions cannot be easily answered, but they can be posed as a framework for investigation.

Some Specific Problems That Are Encountered..... With Answers

Analysis of fauna from archaeological contexts has

certain difficulties peculiar to the nature of the material. Bones are more often than not found in fragments. If they were not broken up in primary use (prior to discard, in the household activities, hunting, predation, natural causes, etc.), they will go through a series of transformations in the taphonomic process. Literally speaking, taphonomy is the " process of death " which wears down the bone (more generally, the artifact), breaks it up, alters its shape and often, obliterates it from the archaeological record.

Therefore, it should always be a consideration that what is being seen archaeologically is never all that was. The nature of each bone--its size, its density and what was being done to it: boiled, baked, burned, chopped, sawed, gnawed etc.--will affect its endurance-life in the ground. In all cases then, the archaeologist views a skewed and unbalanced sample of past life-ways. (Time and nature not only change the past but also erase the past.) Add this handicap to the spatial choices made by the excavator and one never gets 100% total sample nor do the remains represent 100% of the past life activities.

What has been retrieved, however, can reveal a lot about the inhabitants of the site. A more specific set of queries that the zooarchaeologist is asking are:

1) What was being eaten? a)species? b)wild animals versus domesticated animals?
c) quantities of red meats to fowl meats to fish/amphibious meats?

2) What kind of meats were being eaten? This is a qualitative question based on the choices made in food preparation. What kinds of cuts of meat? What kinds of anatomical parts?

If we can identify what was being cooked by the inhabitants, we can venture to pictorialize not only their food preferences, but also their life-style, and, in some very unusual cases, their ethnicity. Randall McGuire at University of Arizona at Tusson, says that:

" Ethnic food practices have traditionally varied greatly between American ethnic groups and they have become institutionalized in recent years in various restaurants. Furthermore, food remains and ceramics make up a large portion of the archaeological record, so these data classes would yield sufficient information to make ethnic identification." (Journal of Anthropological Archaeology, I, 1982: 164)

Ethnic signification can be seen in kosher customs for example. Special cuts of meat would be present; certain

cuts would be totally absent (pork is never in a kosher diet, nor is the back end of beef carcass). Special ceramic dishes with Hebrew lettering and design would be present. Kosher seals (made of lead) attached to meats and other foodstuffs would also be archaeologically visible.

Another interesting question that can be researched archaeologically is placing cuts of meat on an economic scale so insight can be gotten into people's life-styles which otherwise might not be recorded. Further research is needed to collect information on documents and price scaling through time; also needed are comparative tables of price to cuts of meat which can finally be compared to the artifactual data.

Roselle Henn, doctoral candidate at C.U.N.Y. Graduate Center, is in the process of doing this type of research on a 19th century Brooklyn Community. She is comparing archaeological remains from household units to the late 19th century and early 20th century standardization of meat cuts and prices. The significance of this comparison is based on the supposition that people purchase and prepare food as a result of a combination of factors including ethnic preference, religious affiliation, needs to assimilate, occupation field, and level of income.

Summary

In order to avoid the conclusion that the zooarchaeologist's job is one cautionary tale after another, there is one last method of inference that can perhaps give clues to this " quality of life-style " that we speak about. Prices on the economic scale go up and down, depending very closely on factors such as seasonal availability, or scarcity due to political embargoes during European wars or wars with Indians. Times of strife like the Yellow Fever Epidemics of the late 18th century will affect food prices and accessibility.

However, it does remain a fairly, steady constant that beef is more expensive than pork. Late 19th century prices of beef and pork in New York City appear to remain relative to each other, pork for the most part being the less expensive product (Henn, 1982: 14-15). Mutton and lamb seem to vary in their price relationship to beef and pork and require further research and comparison. It may be possible to assume that, on a general level, pork was the relatively cheaper meat in the 18th century, especially if family/household units were procuring their own livestock.

The cost relationship between meats and fowl is a little more complex as they were packaged and priced differently. Therefore, it is difficult to insure balanced

comparison. For example, in 1827, the best cuts of beef were sold at 8-10¢ per pound, while ducks, geese and turkeys were sold at 50¢-$1.25 each and chickens were sold by the pair at 50-63¢. But it is difficult to guess how much these 19th century birds weighed, what they were fed on, how hefty a carcass they provided, how much of their weight was discardable in bone-weight and so on. These questions complicate any hope to compare beef, which was weighed by the pound to fowl, which was sold by the entire carcass. Was the family of five paying less to eat chicken? And in what time period? Can we assume that they were on a lower economic scale than the family which places a metal pot of beef stew on the table? Further research may provide a context in which to compare the facts we already do possess.

Appendix 4 : b
BUTCHERY PRACTICES

Introduction to Identification of Cuts of Meat & Background Assumptions

A general overview of butchery practices can be presented in the following way: Essentially, the domesticated mammal--Bos for Cow, Sus for Pig, Ovis for Sheep/Goat--is divided into Hindquarter and Forequarter, after the Carcass has been split into right and left sides. Cuts of meat that come from the Hindquarter of a mammal would include sirloin, rump, round, flank, shank and feet in general decreasing market cost from sirloin to feet. The Forequarter includes the shoulder, chuck, shank and feet, also in decreasing order of cost. The ribs of mammalia are also cuts of meat ranging from prime ribs, to chops, to smaller cheaper rib cuts. The remaining body parts include neck, head, vertebrae, feet, and tail. R. Lee Lyman observes at Fort Walla Walla Dump Site in Washington State that " .the wrist and ankle have high (nutritional) food value as do the vertebrae and ribs. " (1977: 70)

These body parts present a problem for the archaeologist because, while they were frequently used for

soups, stews, boullions, pies etc., they were also the parts of the body that were cut away and discarded in the butchering process. Discard-butchery and food preparation-butchery can and do look very much alike. It is often difficult to discern what activities preceeded the remains which we observe.

Another difficulty is the problem of distinguishing the difference between food preparation and butchery done in the home versus packaged meats from the market. Lyman calls this functional variation. " Some carcasses, " he says, " were cut into large steaks and roasts while other carcasses were cut into smaller ones. " (1977: 70). At the market level, there were wholesale cuts and retail cuts. The question is what was being bought in the market and cooked at home? Or what was being raised and butchered at home? Further research is needed to identify the products from the market versus those from the household unit.

Finally, there is the problem of presence/absence. There are certain cuts of meat that have no bone, such as, sirloins, mignons, Baron of Beef (the rump), briskets for corning, stew squares etc. No bone means no record, but not necessarily no meat on the table. The archaeologist must always allow for this presence/absence. Animals such as dogs and rodents will cart away bones to places where they are not found, or they will devour the bone

completely. Water, too, will carry bone far from its original deposition site or will destroy it beyond recognition. Again, absence from the archaeological record does not imply that an artifact did not exist. Many other factors need to be considered before such an assumption can be made.

Butchery Cuts Noted for Identification on Domesticated Mammals

Bos = Cow

Sus = Pig

Ovis = Sheep/Goat (Small fragments and several whole antomical parts of the Sheep/Goat family are almost impossible to distinguish from one another. For all intents and purposes, Ovis stands in for both species. However, it is more likely that mutton and lamb were consumed and not goat.)

Mammal Scrap = (The fragments that are not identifiable by species but are important to the sample for comparison to bird and fish remains. Scrap also has a significant number of butchery marks as a result of small stew cuts and/or table cuts.)

Cranium/Skull and Teeth	Cuts include possible cook and discard of the head part or the removal of the head in the butchery process.
Scapula	Shoulder cuts, stews or separation of the shoulder bone from the humerus (upper leg part).
Humerus (front leg)	Midsection possibly for roasts, as a flank (?) cut. Articulating head used for stews (?) or as a result of the butchery process.
Pelvis	Chopped through the acetabulum (ball and socket joint) which is a butchery technique of separating the pelvis from the leg. Use for cooking, stews, etc., is unknown.
Femur (back leg)	Proximal (near to torso) end shaft frequently recovered. Used for large stews (?) or to separate the articulating joint from the mid-shaft which is used for roasts and/or thinner " ring-cut " steaks.
Radius/Ulna (front lower leg) Tibia (back lower leg)	Used for soups if the 'shank' is cut into small pieces. Sometimes the distal (far from torso) end is broken away by spiral facture indicating possible techniques for

	marrow extraction and the making of gelatinous broths.
Metapoidials (feet bones)	For soups and stews, especially in the case of 'pigs feet' or as the result of butchery discard.
Ribs	Prime ribs, roasts chops etc. Very difficult to tell about meat cut because ribs break up so easily and are often placed in the " scrap " category during the analysis stage.
Neck and Tail	Soups and/or discard in butchery process.

Appendix 4:c

VOORLEZER HOUSE FAUNAL STUDY

Introduction

The Voorlezer House was excavated in a series of three-foot by three-foot squares that spanned all areas of the immediate property not blocked by architectural supports (scaffolding and sheeting). No features or discreet areas of activity, such as privies, trash pits, ovens, hearths, trenches etc., were located. Important information obtained from this project was clearly delineated time periods representing stratigraphic levels in the soil. These strata were identified by the dating techniques applicable to ceramics, bottle-glass and architectural artifacts. Faunal analysis was conducted by association of the bones to these time periods that were established by the artifactual remains. Two major areas of the Voorlezer House will be considered in this report : 1) the backyard area and 2) the house and basement area.

An Explanation of the Charts and Observed Patterns in the Faunal Remains at the Voorlezer House Site

The charts have arranged the Voorlezer House data in the three following ways. The first is a comparison of the numbers of bones in the backyard area to the number of bones in the house area. The comparison includes the numerical relationship through time from post-1740 through the early 20th century. The second is a comparison of butchery techniques between the backyard area and the house area. And, the third is a closer look at the pre-1760 levels of the backyard area

in attempts to put forth some perspectives about 18th century food ways.

In comparing the total number of bones in each area (backyard/house) between the 18th and 19th centuries, one notices significant differences in numbers through time (see charts 1-5). In the 18th century, there are more bones in the backyard and, conversely, in the 19th century, there are more bones in the house area. A possible hypothesis is that early inhabitants dumped food refuse in the backyard (out the back kitchen door) or possibly spread the refuse as fertilizer for a garden. The second part of this hypothesis, however,is that the 19th century inhabitants of Voorlezer House were dumping in the basement of their house. Why? Would not loose garbage create sanitary problems? Or did the refuse pre-date the actual basement area as a structure? Excavation did not uncover a trash pit or a well or cistern, therefore trashing of these bones in a contiguous area of human occupation seems odd and still remains to be explained.

Sheep/Goat bones seem to be an anomaly in all contexts especially when one refers to original data sheets and pictures. The majority of Sheep/Goat bones recovered were various teeth from one context. This sugguests that at one given time in the 18th century, a head of mutton/lamb was discarded. Whether this was a result of cooking activities or of home butchery (perhaps a seasonal dish such as, Easter, Passover, a wedding etc.) is not discernable.

Cow and pig bones were found in all contexts. In the 19th century contexts beef seems most prominent in number,

Chart 1: Faunal Information from the Backyard Area of the Voorlezer House

Dates	1870-1900		1815-1870		1800-1815	
	Level 3-4		Level 5-7 w/7/8		Level 8-9	
	#	%	#	%	#	%
Species	TNB= 24		TNB= 185		TNB= 254	
Bos	0	0	9	4.8	15	5.9
Sus	4	16.6	26	14.0	13	5.1
Ovis/Capra	0	0	3	1.6	4	1.5
Scrap:(mammal)	8	33.3	87	47.0	1.95	76.7
Aves	11	45.7	16	8.6	23	9.0
Pisces	1	4.1	1	0.5	0	0
R.A.A.P. (rodent/aves/ ampib/pisces)			25	13.5	4	1.5
Unident.						
Other			feline 1	0.5		
**********						
Mammal to Bird	TNB= 23		TNB= 141		TNB= 250	
	12	50	125	88.6	227	90.8
	11	45.8	16	11.3	23	9.2
**********						
Between Mammal Only	TNB= 12		TNB= 125		TNB= 227	
Bos	0	0	9	7.2	15	6.6
Sus	4	33.3	26	20.8	13	5.7
Ovis/Capra	0	0	3	2.4	4	1.7
Scrap	8	66.6	87	69.6	195	85.9
**********						
Butchered						
Bos	0		8		4	
Sus	4		0		0	
Ovis/Capra	0		0			
Scrap	0		6		0	
Aves	0		0		3	

Chart 1: Faunal Information from the Backyard Area of the Voorlezer House,Cont.

Dates	1780-1800 Level 10		1740-1770 Level 11-14	
Species	# TNB=70	%	# TNB=292	%
Bos	2	2.8	16	5.4
Sus	4	5.7	24	8.2
Ovis/Capra	0	0	14	4.7
Scrap:(mammal)	56	80.0	185	63.3
Aves	0		15	51.0
Pisces	0		5	1.7
R.A.A.P. (rodent/aves/ ampib/pisces)	8	11.4	32	10.9
Unident.				
Other			(feline)1	.3
**********	TNB=62		TNB=259	
Mammal to	62	100.	239	92.2
Bird	0	0	34	13.1
**********	TNB=62		TNB=239	
Between Mammal Only				
Bos	2	3.2	16	6.6
Sus	4	6.4	24	10.0
Ovis/Capra	0	0	14	5.8
Scrap	56	90.3	185	77.4
**********				
Butchered				
Bos	0		10	
Sus	0		0	
Ovis/Capra	0		0	
Scrap	2		1	
Aves	0		0	
**********				

Chart 2: Faunal Information from the Basement Area of the Voorlezer House (Squares N0 - N12).

Dates	1900-1940		1820-1900	
	Level 1-3		Level 4-6	
Species	#	%	#	%
	TNB= 156		TNB= 47	
Bos	21	13.4	3	6.3
Sus	8	5.1	8	17.0
Ovis/Capra	9	5.7	1	2.1
Scrap:(mammal)	71	45.5	34	72.3
Aves	35	22.4	1	2.1
Pisces	5	3.2		
R.A.A.P. (rodent/aves/ ampib/pisces)	12	7.6		
Unident				
Other	1	0.6		
**********				
	TNB= 165		TNB= 47	
Mammal to Bird	109	66.0	46	97.8
	35	21.2	1	2.1
**********				
	TNB= 130		TNB= 46	
Between Mammal Only				
Bos	2.1	16.1	3	6.5
Sus	8	6.1	8	17.3
Ovis/Capra	9	6.9	1	2.1
Scrap	71	54.6	34	73.9
**********				
Butchered				
Bos	15		1	
Sus	1			
Ovis/Capra	1			
Scrap	15		22	
Aves	5			

Chart 3: Faunal Information from the Basement Area of the Voorlezer House (Squares S3W3 and S3W9)

Dates	1900-1940		1900-1940		1820-1850	
	Level 1-3(S3W9)		Level 1-2 (S3W3)		Level 5 (S3W3)	
Species	# TNB= 8	%	# TNB= 12	%	# TNB= 10	%
Bos	1	12.5	0	0	0	
Sus	1	12.5	0	0	2	20.0
Ovis/ Capra	0	0	1	8.3	0	0
Scrap: (mammal)	2	25.0	0	0	3	30.0
Bird	2	25.6	0	0	1	10.0
Pisces	0		0	0	0	0
R.A.A.P. (rodent/ aves/ ampib/ pisces	3	37.5	11	91.6	4	40.0
Other						
********	TNB= 6		TNB= 1		TNB= 6	
Mammal to	4	66.6	1	100	5	83.3
Bird	2	33.3	0	0	1	16.6
********	TNB= 4		TNB= 1		TNB= 5	
Between Mammal Only						
Bos	1	25.0	1	100	0	0
Sus	1	25.0	0	0	2	16.0
Ovis/ Capra	0	0	0	0	0	0
Scrap	2	50.0	0	0	3	60.0
*********						
Butchered						
Bos	1		0		1	
Sus	0				1	
Ovis/ Capra	0		1		0	
Scrap	0		0		0	
Aves	0		0		0	

Chart 4: Faunal Information from the Basement Area of the Voorlezer House

Dates	1900-1940		1800-1900		1760-1800	
	Level 1-3		Level 4-7		Level 8-10	
Species	# TNB= 7	%	# TNB=44	%	# TNB= 7	%
Bos	0	0	4	9.0	3	42.8
Sus	0	0	0	0	6	0
Ovis/Capra	1	14.2	0	0	0	0
Scrap: (mammal)	5	71.4	8	18.1	3	14.2
Aves	0		28	63.6	0	0
Pisces	0		3	6.8	0	0
R.A.A.P. (rodent/aves/ pisces)	1	14.2	1	2.2	1	14.2
Unident.						
Other						
**********						
Mammal to Bird	TNB= 7		TNB= 40		TNB= 6	
	7	100	12	30	6	100
	0	0	28	70	0	0
**********						
Between Mammal Only	TNB= 6		TNB= 12		TNB= 6	
Bos	0	0	4	33.3	3	50
Sus	2	0	0	0	0	0
Ovis/Capra	1	16.6	0	0	0	0
Scrap	5	83.3	8	66.6	3	50
**********						
Butchered						
Bos	0		3		2	
Sus	0		0			
Ovis/Capra	1		8			
Scrap	0		2			
Aves	0		0			

Chart 5. Comparison of Bones from 19th to early 20th Century Levels of the Backyard Area of the Voorlezer House

BACKYARD AREA		HOUSE AREA	
#			#
0	BOS	(cow)	21
4	SUS	(pig)	8
0	OVIS/CAPRA	(sheep/goat)	9
11	AVES	(bird)	35
8	SCRAP	(mammal)	71
total 23		total	144
1870-1900 (Levels 3 & 4)		Early 20th century (Levels 1-3)	
9	BOS	(cow)	3
26	SUS	(pig)	8
3	OVIS/CAPRA	(sheep/goat)	1
16	AVES	(bird)	1
87	SCRAP	(mammal)	34
total 141		total	47
1815-1870's (Levels 5-7)		1820-1850's (Levels 4-6)	

especially in the house area, which is the area where the 19th century concentration is greatest. Pork seems to outnumber beef in both contexts (house area and backyard area) but the concentration is highest in the 18th century contexts in the backyard area.

Beef as a dish became more notable in the 19th century. Reasons for this could be an expanding market which provided for more distribution throughout the five boroughs of New York. Production and distribution of more carriable cuts and more individualized cuts increased in this time. It is possible that pork was being eaten in the 18th century household because it was available as a home-raised animal and not a market item. Pork could be slaughtered in one season, cooked immediately or preserved for the coming months by salting and smoking techniques.

One cautionary note is to consider possible changes in food preparation during and between the 18th and 19th century kitchens. What appears to be more beef in the 19th century may be a new manner of consumption: making smaller, more accurately butchered pieces. This would place a higher number of bones in the archaeological record, even if the actual amount of bone and meat remains the same. It was in the early 19th century that the butcher's saw was introduced. This one tool would soon revolutionize the meat industry.

Also pig bone tends to be more breakable and fragmentary than the denser, thicker beef bone. The site sample could suggest more pig bones when in fact it is merely the taphonomic phenomenon being observed, i.e. differential

preservation.

Lastly, the 19th century deposits reveal a considerable rise in the consumption and/or discard of bird bones. One hypothesis is that the Voorlezer House inhabitants were indeed eating more chicken/fowl in this time period. However, lack of researched price scales make it difficult to say anything about the economic quality of life (as previously mentioned). Also difficult is the small sample present. The bird remains seem to be a bit like our sheep/goat head. Many of the bones recovered are parts of a Robin skeleton. Were these people eating wild birds? Or was this just a bird that died in the trash area?

It is interesting to note that the continuum of butchery techniques at the Voorlezer House presents a very clear reflection of the developments in technology (see chart 6). All levels that dated 1800 or before reveal only chop, chop and break, and table-cut marks. The post-1800 levels, in both backyard and house areas, show the sawed mark (distinct lines/striae). In the late 19th century, the distinctive sawed, ring-shaped bone is also present at the Voorlezer House. This ring-cut is made from a thigh, or more often, a shincut from pork or beef. It is used for soups and/or as the center bone of the thinner, more individualized " round steak".

Again, there is a change from 18th to 19th century. Pre-1800 bones in the backyard levels have a total of 45 bones with butchery marks from an axe or cleaver (chop) and that number decreases to a mere 19 in the post-1815

Chart 6: Number of Bones Showing Natural Breaks Versus Butchery Marks

Backyard Area	Butchered	Natural Break
Level 3-4 1870-1900		
Bos	-	-
Sus	4	-
Ovis/ Capra	-	-
Mam. Scrap	-	8
Aves	-	11
Aves Scrap	-	-
Level 5-7 1815-1870		
Bos	8	1
Sus	-	26
Ovis/ Capra	-	3
Mam. Scrap	6	81
Aves	-	16
Aves Scrap	-	
Level 8-9 1800-1815		
Bos	4	11
Sus	-	13
Ovis/ Capra	-	4
Mam. Scrap	-	195
Aves	3	20
Aves Scrap	-	-
Level 10 1780-1800		
Bos	-	2
Sus	-	4
Ovis/ Capra	-	-
Mam. Scrap	2	54
Aves	-	-
Aves Scrap	-	-

Basement Area	Butchered	Natural Break
Level 1-3 1900-1940		
Bos	15	6
Sus	1	7
Ovis/ Capra	1	8
Mam. Scrap	15	56
Aves	5	30
Aves Scrap	-	-
Level 4-6 1820-1900		
Bos	1	2
Sus	-	8
Ovis/ Capra	-	1
Mam. Scrap	22	12
Aves	-	1
Aves Scrap	-	-

Chart 6: Number of Bones Showing Natural Breaks Versus Butchery Marks, Cont.

	Backyard Area		Basement Area	
	Butchered	Natural Break	Butchered	Natural Break
Level 11-14 1740-1770				
Bos	10	6		
Sus	-	24		
Ovis/	-	14		
Mam. Scrap	1	18.4		
Aves	-	-		
Aves Scrap	-	-		

contexts.

In the house area, sawed/cut bone begin at a mere 1 or 2 in the early 19th century, but by the post-Civil War contexts there are 51 bones with saw/chop marks and saw-only marks.

Chart 7 presents a close-up look of numbers and percentages from this backyard area. The majority of the assemblage was deposited in the 18th century. In number, pork bones seem to be the forerunner, with beef bones, second. However, it may be interesting to note the high number of mammal scraps present (460 in number). It is difficult to discern species derivation with scrap but what can be observed is the frequency of butchery practices. Whether the scrap remains are a result of cookery or taphonomic processes after discard is again difficult to discern. It is clear that what we are seeing is the result of food consumption as many of these scrap pieces have chop, cut, and saw marks present.

Chart 7: Comparison of the Total Number of Bones from the 18th and 19th Century Levels in the Backyard Area of the Voorlezer House

	EIGHTEENTH CENTURY Levels 8-14		NINETEENTH CENTURY Levels 3-7	
	#	%	#	%
BOS (cow)	38	6.3	9	23.0
SUS (pig)	43	7.1	30	18.1
OVIS/ CAPRA (sheep/ goat)	18	2.9	3	1.8
SCRAP (mammal)	460	76.4	95	57.5
AVES (bird)	38	6.3	27	16.3
PISCES (fish)	5	0.8	1	0.6
TOTAL	602	93.8	165	117.3

COMMENTARY ON THE COMPARISON OF BONE TO SHELL AT THE VOORLEZER HUSE AND HOW THAT COMPARISON ARTICULATES WITH THE NATURE AND FUNCTION OF THE HOUSE ITSELF. By K.T. Morgan

The comparison of apples to oranges is, as a general rule, an exercise that brings fruitless results. However, if we could suspend this rule for one insight that it offers, perhaps a clearer picture of the Voorlezer House and its historical development will follow.

The sequence of ownership of the Voorlezer House from 1695 to 1936 offers the first clue to the functions, as a structure, it served, and the patterns of use that went on within that structure. If the sequence of ownership is followed carefully, a major change in function can be discerned. The change seems to occur in the 1790's--which was a time in America of great change. After the Revolutionary War, the cities and their surrounding suburbs grew enormously, not only in population but in complexity: services, public works, transportation, marketing, industry, technology and so on.

If the Voorlezer house is observed as a prism of these multiple forces and changes, then an interesting observation can be made. Before 1790, Voorlezer house was a residence of a Voorlezer (schoolteacher), Blacksmith, Mason/Farmer, Cooper, and Turner. Such occupations can be categorized as the artisan crafts or specialized knowledge of some kind. After the 1790's, the residence was of Farmer, Store-owner, Saloon-Keeper, Confectioner, and finally, Restauranteer. These subsequent functions fall into the general category of entrepreneurial skills which focus on the marketing of goods, not skills and services. (See Graph IV)

Based on these observations which points to a major change in the 1790's, we can then, for one moment, compare apples to oranges:

① It is noted that there is more bone debitage in the backyard

area in the pre-1790 levels excavated. There is, in comparison, relatively little shell quantities. Explanations for this could be as follows:

a)that there is some relation between the kind of owner (farmer, mason, blacksmith, turner, cooper etc.) and home-bound animal husbandry, home-bound butchery, home-bound refuse dumps, and little market (core-periphery) activiy and flow.

b)that scanty shell recovered archaeologically could mean either the oyster/clam industry was not yet a burgeoning business or that what great quantities of shell there were, were recycled into the ground as marle-fertilizer. This would explain the presence of bone and little quantities of shell.

(2) It is noted that there is more shell in the house area in the post-1790 levels excavated, and especially, in the post-civil war era. Explanations for this could be as follows:

a)that the subsequent functions of farmer to merchant to proprietor points to an increased dependence on the core market for goods and customers. Less and less self-sufficiency results in less and less re-cycling and more debitage of consumed goods, in this case, shell.

b)that the change in function from the cultivator/husbandman/artisan to the merchant/storeowner/proprietor will be reflected in the material culture and thus serve as one of the factors that cause the difference in taphonomy between the pre- and post-1790's eras.

c) that the 'public house' which serves meals to clientele could very well be serving large quantities of

oyster and clam for meals and hors d'heuvres.

d)that the shell refuse was being dumped near the the house area for garden fertilizer or road-bedding and that the bone refuse(also consumed at public meals) was being carted away by hired sanitation services beginning to be employed in the mid-19th century.

SHELL QUANTIFICATION FOR THE BACKYARD AREA, W 18.5

	MID-LATE 1800's Level 3-4	1815-1830 Level 5-7	1760-1790 Level 8-14
Oyster #	10	26	3
Oyster in grams	51.4	255.6	29.1
Clam #	7	47	11
Clam in grams	14.3	357.6	79.9
Other shell in #	—	—	2
Other shell in grams	—	—	0.7

SHELL QUANTIFICATION FOR THE HOUSE AREA, N 0-12 & S3

	MID-LATE 1800's (19th C) Level 1-3	1790-1830 (1820-1900) Level 4-6
Oyster #	135	5
Oyster in grams	150.9	18.8
Clam #	110	—
Clam in grams	295.	—
Other shell #	14	1
Other shell in grams	11.7	.3

KTW '84

CAUTIONARY COMMENT: It has been noted that oysters are more or less 1X their weight in grams, that is, for each oyster (1 fragment) there is 1 gram of weight. Clams however, seem to be 2X their weight in grams, so that for each clam fragment is two grams of weight. This means that people could be eating more oysters even though the weight in grams is less.

This is an important observation when taking into account the amounts that people ate at the Voorlezer House. Number and weight should be considered in conjunction with each other.

******TOTAL NUMBER OF BONES AND TOTAL NUMBER OF SHELL******
COMPARATIVE QUANTIFICATION BETWEEN BACKYARD AREA AND HOUSE AREA IN THE SAME TIME PERIOD: POST-1790's

	Backyard Level 3-7		House Level 3-6 (& Level ?)	
TNB:	121	59%	210	44%
TNS:	84 (678g.)	40%	265 (457g.)	55%

Level 8-14 (no comparison to House Area)

TNB:	416	96%
TNS:	16 (109g.)	3%

KTM '84

Appendix 5: Inventory of the Estate of Jacob Rezeau Dec, Taken of 27th/27th August, 1790

A true and perfect Inventory of the Lands Goods & Chattels belonging to the Estate of Jacob Rezeau late of the County of Richmond and State of New York Deceas'd as taken and appraised this twenty Sixth and Twenty Seventh days of October 1789.

	L	S	D
Plate 4 Table Spoons and 6 Tea Spoons	2	—	—
Mortgage against the Lands of Joshua Brown	330	13	10
1 Feather Bed Straw bed 1 Sheet, 2 Pillows, 1 Blanket 1 Spread a Bedstead and Cord	4	—	—
1 Scrutoir 50/— 1 Looking glass 20/—	3	10	—
2 Gum Dining Tables @ 5/—	—	10	—
10 Common Chairs and 1 Elbow Do.	—	15	—
1 Copper Coffee pot 1 Tin Pitcher 2 Candlestics 1 Coffee Mill	—	10	—
1 Pr. Andirons, 2 Pr. Tongs, 3 Pewter platters, 6 plates 1 Bason	—	3	—
1 Large English Bible and Sundry other old Books	—	5	—
1 Box old Iron, 1/2 a hatchel, 20 Round bottles 5 Square Do.	—	10	—
1 Cupboard, 1 Chest, a 10 Gallon Keg & 5 old Casks	—	10	—
1 Pewter Funnil and Mustard Pot, 1 Honey Pot	—	3	—
1 Bed, Bolster, 2 Pillows, 3 Coverleds & 1 Sheet	4	—	—
1 Feather Bed, 2 Pillows underbed, Curtins, beadstead & Cord.	5	—	—
1 Dining Table, 1 Earthen Pot, and Kitchen Bell	—	3	—
1 Meat Cask 8 old Casks. 1 Wool Wheel. 1 Quill Wheel	1	8	—
2 Boxes of old Iron. 1 Scalebeem & 2 Salt boxes	—	10	—
190 Round bottles. 5 Iron pots. 2 Brass Kittles	4	1	—
1 Board Ax. 1 Broad Ax. post Ax & 2 Chopping Axes	—	12	—
1 Beetle. 3 Wedges. 1 Auger. 1 Barking Iron	—	10	—
Old Sleigh Iron Cart Rope and a Swiveltree	—	6	—
2 Water pails. 6 Keelors. 1 Griddle and 1 Lye Cask	1	8	—
2 Churns. 1 Washing tub. 1 Saddle. 1 Tray & Half Bushel	1	13	—

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2 Broad Hoes. 3 Spades & Pick Axe	—	10	—
1 Tin pale & Seive 4/. 1 Pr. Smoothing Irons 2/.	—	6	—
1 Pewter Bason 3/. 1 pan & Gridiron 4/.	—	7	—
1 Pr. Andirons 6/— 3 Trammels 15/— 3 old pal[e]s 1/6	1	2	6
4 Firkins a 10 Gallon Keg. 5 old Barrels . 2 Grindstones	—	12	6
7 Hives of Bees. 3 Empty Hives. 1 Hogshead cont'g 1/2 Hides Calf skin	—	10	—

Jacob Rezeau Estate Inventory (1789), continued.

	L	S	D
Scales and Weights 6/— 6 Hogsheads & 2 Barrels	1	6	—
3 Gumboards 6/— Wagon and Geirs 35/—2 ploughs 20/—	3	1	—
1 Sled. 1 Harrow. 15/— Drawing knife & 2 forks 5/—	1	—	—
1 Corn Fan and a coarse Hatchel	—	6	—
1 Roan Horse. 10L. 1 Do. 1 L. 1 Sorrel Do. 3 L.	14	—	—
6 cows 24L. 1 Heifer. 1 Bull [?] 4 Calves 2/8			
3 Iron bound Casks 4/— 1 Sythe and Sneath. 3/—	—	7	—
8 Sheep 4 L 16 S. Flax brake 2/—	4	18	—
1 Mow [Meadow] of Fresh Hay and 4 Stacks of Salt Hay	20	11	—
9 1/2 Bushels Sewing of Rye in the Ground	5	—	—
4 1/2 Bushels — Do. — Do. Wheat.	5	—	—
A Quantity of Flax laying out Rotting Divided	1	—	—
1 Mow of Corn [?]	—	17	—
4 1/2 lb Woollen Yarn 18/— 1 lb. Wool 2/— Divided	1	—	—
21 Bushels of rye 4L. 14 S. 6d. 21 Bushels of Buckwheat. Divided	6	16	6
60 Bushels of Corn at 4/ [?] Divided—	12	—	—
120 Acres of Land at 6L. pr. and nine Acres of Salt meadow @ 4L.	746	—	—
1 Negro (Cuff) 50L.— 1 Do. (Tom) 50 L. [?]	90	—	—
1 Negro Wench (Dinah).	20	—	—

Appraised By us
Richard Conner
Lewis Ryerss.

Peter Rezeau
Peter Winant
Anthony Vanpelt
Executors

Be it Remembered That on the Sixteenth day of August in the Year of our Lord Onethousand and Sevenhundred and Ninety personally came and Appeared before me Adrian Bancker Surrogate of the County Aforesaid, Peter Rezeau, Peter Winant and Anthony Van Pelt, Executors of the Estate of Jacob Rezeau Deceased, And being duly Sworn on their oath declared, That the preceding Writing Signed by them the Deponents, Contains a true and perfect Inventory, of all and Singular the Goods & Chattels and Credits which were of the Said Jacob Rezeau deceased as far as has come to their hands, possession, or knowledge, or into the hands or possession of any person or persons in trust for them to their knowledge— [signed] Adrn. Bancker Surrogate

[Transcribed 8/84 by Charles Sachs, from a xeroxed copy of original document in files of Richmond County Surrogate's Office, St. George, SI]