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African-American Influence on the Chesapeake Bay Log Canoe: Evidence from Nineteenth Century Probate Inventories and Population Census Records of York County, Virginia and Worcester County, Maryland

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**AFRICAN-AMERICAN INFLUENCE ON THE CHESAPEAKE BAY LOG CANOE:
EVIDENCE FROM NINETEENTH CENTURY PROBATE INVENTORIES AND
POPULATION CENSUS RECORDS OF YORK COUNTY, VIRGINIA AND
WORCESTER COUNTY, MARYLAND**

A Thesis

Presented to

The Faculty of the Department of Anthropology

The College of William and Mary in Virginia

In Partial Fulfillment

Of the Requirements for the Degree of

Master of Arts

by

Albert James M. Mamary

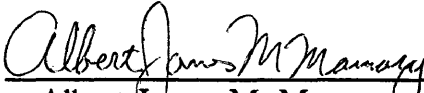
1994

APPROVAL SHEET

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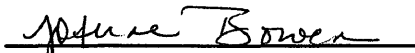
the requirements for the degree of

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Albert James M. Mamary

Approved, March 1994


Kathleen Bragdon


Joanne Bowen

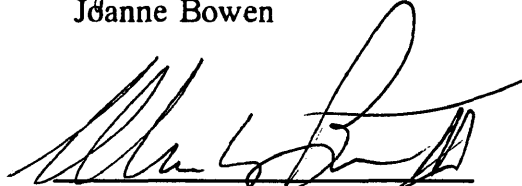

Marley Brown III

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Abstract

African-Americans in York County, Virginia contributed substantially to the nineteenth century development of the "Chesapeake Bay Log Canoe" and the oystering industry. York County, Virginia and Worcester County, Maryland were well known centers of "Chesapeake Bay Log Canoe" construction each with distinct construction methods and canoe form. Unlike Maryland, York County, Virginia log canoes were built by eye without models or plans resulting in unique, slightly asymmetric boats.

Evidence of the African-American role in the development of the York County "Chesapeake Bay Log Canoe" exists in nineteenth century county probate inventories and federal census records. York County probate inventories reveal a pattern of white farmers owning one or many canoes before emancipation indicating slave participation in their production and use for oystering. In contrast, Worcester County inventories contain no individual decedents with more than one canoe and very few canoes in general. Completely independent oystermen and full-time fishermen in both counties rarely appear in estate inventories.

Census data compliment these patterns. Pre- and post- emancipation censuses in York County reveal that most free African-Americans were oystermen or fishermen and that these African-Americans were a majority in their occupations. The number of free African-Americans involved in oystering/fishing implies that those necessary skills were also possessed by a significant number of slaves who's skills and occupations were never recorded. In the absence of an African-American/slave based oystering/fishing work force, Whites dominate the Worcester County census listings for these water related occupations.

The cultural distinction between York County and Worcester County canoe builder and user populations correlates directly with the distinguishing Chesapeake Bay Log Canoe manufacture techniques and finished forms. These physical and methodological differences between York County canoes and Worcester County canoes are deeply rooted in divergent cultural values of spatial organization, symmetry and improvisation associated with Anglo-American and African-American traditions. White Worcester County canoe builders adhered to the Anglo-American cultural norm of concern for symmetry and reproducibility. African-American canoe builders and users in Virginia manipulated African methods and form to maintain a link with an African identity and heritage based on spontaneity and improvised innovation. The maintenance of the African canoe building tradition calls into question theories of cultural assimilation and acculturation which posit a replacement of an African aesthetic during the period of enslavement and emancipation.

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WORCESTER COUNTY, MARYLAND

INTRODUCTION

The study of the material contributions and achievements of African-Americans is expanding rapidly. Research has elucidated many creative material contributions of African-Americans, including textiles, basketry, ironwork, pottery, quilt-making and architecture. Current literature explores a wider range of African-American cultural elements and discusses their African influences (Holloway 1990; Sobel 1987; Thompson 1983). Until recently, African-American innovations and attributes were historically ignored or denied. In most cases, the ultimate appropriation of a technique or style by white communities has masked the earlier African-American contribution. This is particularly true of the nineteenth century Chesapeake Bay Log Canoe.

A unique working watercraft developed in the nineteenth century Chesapeake Bay is known descriptively as the "Chesapeake Bay Log Canoe". The Chesapeake Bay Log Canoe has precedent in the single log canoe that served many peoples both historically and prehistorically.

Oystering in the nineteenth century Chesapeake expanded from private activity into a huge industry and the once simple log canoe was forced to evolve into the sophisticated, multi-log Chesapeake Bay Log Canoe to meet the demands of larger catches, longer voyages and increasing competition. M.V. Brewington, an early 20th century log canoe authority, maintains that the log canoe's development is connected with that of the oyster fishery so intimately that the two are almost inseparable (Brewington 1937).

Throughout the nineteenth century, two centers of log canoe production developed in the Southern Chesapeake: the Poquoson River in York County, Virginia and the

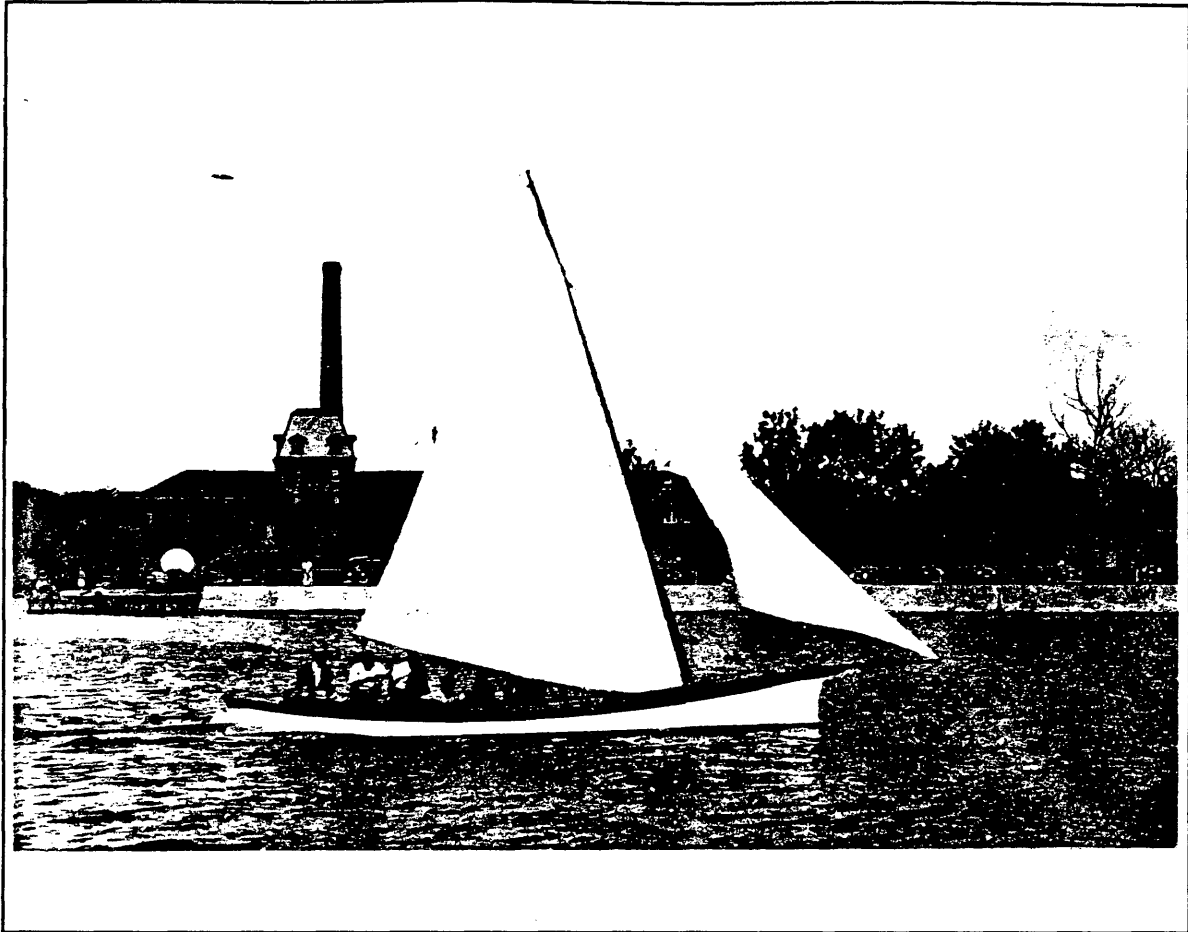


Figure 1 Poquoson Canoe: Chesapeake Bay Log Canoe, Virginia
(photo: "The Mariners Museum")

Pocomoke Sound in Worcester County, Maryland (Brewington 1937:7). Methods of production and log canoe form set these centers' canoes apart. Worcester County, Maryland canoes adhered to strict symmetry and to reproducible design. In contrast, York County, Virginia canoes were never symmetrical and were always made by eye without plans or models (The Newport News 1938:1; Brewington 1937:8). Separated by only 40 miles and the Chesapeake Bay, the centers' distinct building methods and contrasting emphasis on symmetry and reproducibility suggest adherence to differing cultural traditions.

The primary goal of this research is to demonstrate, using material culture evidence extracted from probate inventories and population censuses, that the Virginian Chesapeake Bay Log Canoe form is a product of African-American use, production and innovation. Sources for this study include a century of York County, Virginia probate inventories quantified according to canoe and canoe related categories in ten year intervals. Other documentary evidence is extracted from 1850 and 1870 federal census lists of peoples' race, sex and occupation. Select Worcester County, Maryland inventories and identical census data serve to contrast and strengthen the York County evidence.

In Africa, methods of construction, shape and form of the canoe were derived from a distinctly African world view. Canoe building and navigation were an integral component of the West African cultures upon which African-American culture was founded. Europeans introduced this world view to Colonial North America with the importation of West African people. In the context of the log canoe the African-American world view manifests itself primarily in the asymmetry and uniqueness of each York County, Virginia canoe's improvised form. This contrasts with the Georgian principles of control over nature, order and standardization seen in Worcester County, Maryland canoes. African-Americans built and used the log canoe in this social context in which a dominant Georgian world view and a minority African-American world view were diametrically opposed. Evidence from the canoes themselves, as well as from documentary sources, demonstrates these contrasts and their origins in divergent cultural traditions.

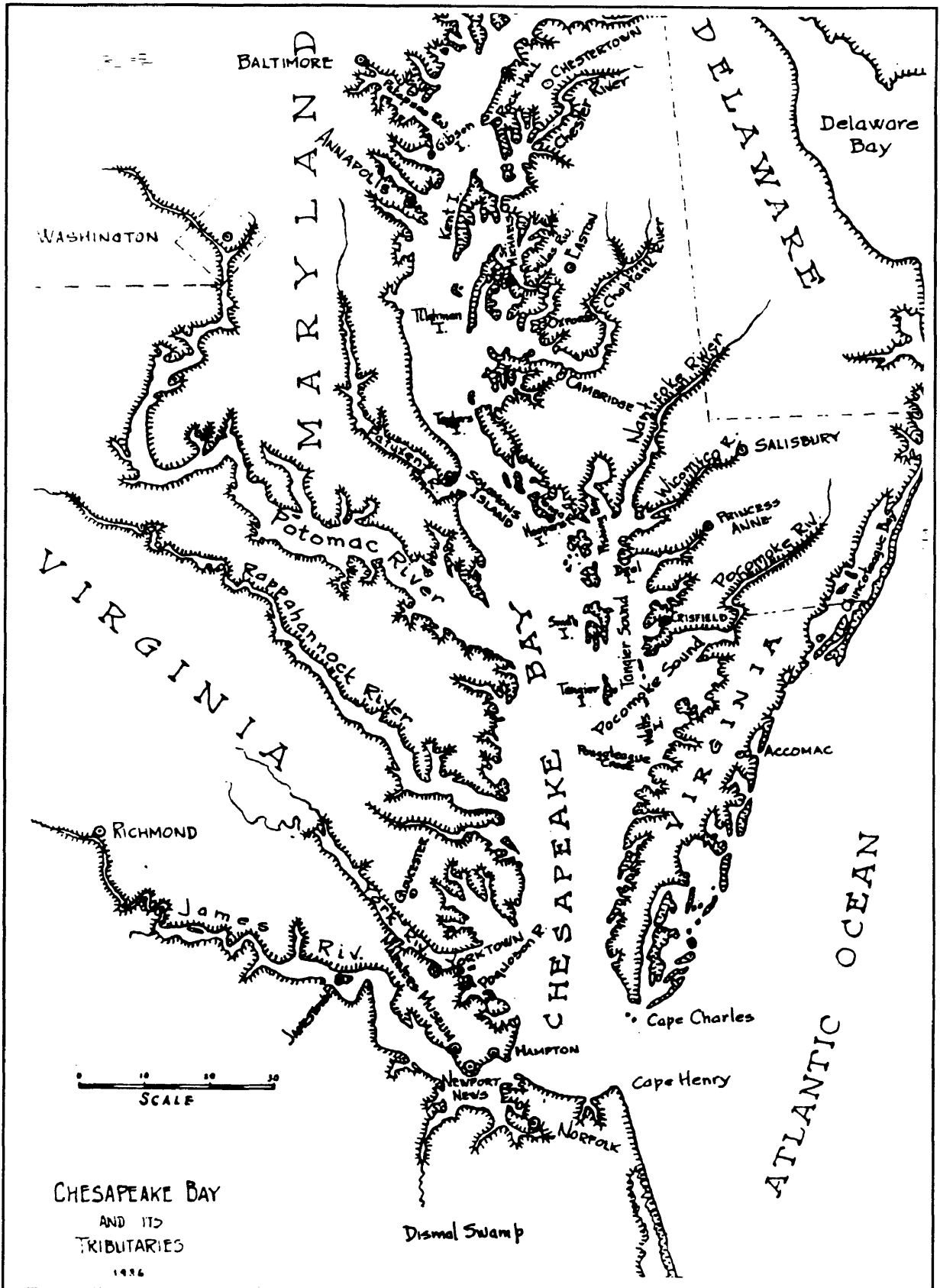


Figure 2 Map of the Chesapeake Bay (drawing by A.C. Brown in Brewington 1937)

CHAPTER I

THE LOG CANOE IN PRE-COLONIAL AND COLONIAL WEST AFRICA

The nineteenth century Virginian Chesapeake Bay Log Canoe is strongly associated with African heritage. Smith (1970) compiled extensive evidence for pre-colonial and early colonial canoe use in West Africa. The first European writers in West Africa reported the use of the canoe up and down the coast and in the rivers and lagoons that lead from the interior land (Smith 1970:515). Fifteenth and early sixteenth century accounts contain numerous descriptions and reports of canoes found in West African life. Smith (1970:516) acknowledges that European contact in West Africa brought change to local technology. However, the ubiquity of the references to the canoe in early writings strongly supports the pre-colonial existence and African origin of these vessels. In all likelihood the canoe has been the primary source of transportation in West Africa for many thousands of years pre-dating European exploration (Smith 1970).

Material evidence or survivals of early canoes have not been found and therefore do not inform the discussion of historic canoe form and use. However, modern West Africans were using (in 1970) canoes dug from single tree trunks (Smith 1970:516). Presumably, these canoes and people are part of the long African cultural legacy of canoe construction and use.

The canoes of West Africa varied in size from small fishing canoes to 80 foot sea going canoes, 7 to 8 feet in width, capable of carrying 80 or more people. Canoes this large were made from the single trunks of huge tropical trees. Ulysses Young (1940) discusses the distribution of canoe types, tree species and geography in West Africa.

In general the coast of West Africa is abrupt, lacking the sheltered transition waters of bays and barrier islands typical of the Chesapeake Bay region. The early accounts of West African canoe use communicate a distinction in canoe use responding to the geographic division between ocean and inland waters. Some Africans specialized in ocean voyages and others in river and lake travel. Sixteenth and seventeenth century writers noted the specific skills of various West African groups pertaining to abilities to manage canoes in breaking water, rough and windy open seas, over bars and to swim and dive (Smith 1970:516). Canoe construction and a variety of navigation skills were an integral component of West African life.

Africans relied on the log canoe for trade, fishing, communication and the maintenance of political and social order (Smith 1970). When the West Africans were kidnapped and sold into slavery in the New World, they brought with them the skills and perspectives which influenced the development of the nineteenth century Chesapeake Bay Log Canoe.

CHAPTER II
CHESAPEAKE BAY LOG CANOE CONSTRUCTION IN YORK COUNTY,
VIRGINIA AND WORCESTER COUNTY, MARYLAND

African-American canoe building skills are not typically documented in historical writing, and are likewise ignored in more recent recitations of the history of the Chesapeake Bay Log Canoe. This is most evident in the most complete and widely known history of the nineteenth century Chesapeake Bay Log Canoe commissioned by The Mariners' Museum in Newport News Virginia and published in 1937 (Brewington 1937; 1937a). Author M.V. Brewington's two volume publication Chesapeake Bay Log Canoes is based upon interviews with living canoe builders, probate inventories, and surviving half models and plans.

Brewington writes that his book "endeavors to trace its lineage from the simple pole-and-paddle parent craft of the Indians to the highly complex craft the white man developed from it" (Brewington 1937:ix). Brewington offers a brief but insubstantial history of single log canoe in general making claims of European innovation. In his "endeavor to trace the various phases of history--economic, political and social" (Brewington 1937:ix) that predicate the canoe's existence he neglects discussion of the contributions of African-Americans.

This research, will demonstrate the African-American involvement in the construction and evolution of the nineteenth century Chesapeake Bay Log Canoe by examining two regional patterns of canoe construction and use. The canoe construction methods used in York County, Virginia and Worcester County, Maryland correlate with

differences in the local populations shown in census and probate inventory records. The two regional methods were most strongly evident in the second half of the nineteenth century as the need for oystering vessels peaked.

Two principle centers of canoe production emerged in the Southern Chesapeake during the course of the nineteenth century, both of which reached prominence by the 1890's. Virginia canoes built near the Poquoson River in York County were the best known. Consequently, all Virginia canoes were called Poquoson canoes. Forty miles across the bay on the Eastern Shore of Maryland from the Pocomoke Sound to the Honga River in Worcester County lay the second center (Brewington 1937:7). All builders had their own techniques varying slightly from the regionally accepted building practice. But, the two regional styles were unmistakably unique. Brewington describes in detail the Virginia construction method and the Maryland construction method and the resulting effects on the final products shape and performance (Brewington 1937:7-20).

All Chesapeake Bay Log Canoes are composed of hewed tree trunks. Hewing in this case means the logs were made flat on at least one side. This was accomplished with a broad axe, a tool made specifically for facing timber in this manner. Convex and concave shape was imparted primarily with the scoop adze, a sharp curved blade hoe-like tool.

The yellow pine, sometimes called the long leaf pine, is the most abundant and best suited tree for the canoes of the Chesapeake region. The trunks grow tall and straight and it is not uncommon to find sections of trunk unblemished by knots for forty feet. Although rare today, yellow pines over three feet in diameter were easily had in the early and middle nineteenth century. Yellow pine is harder and is more resistant to rot

than most northern and western pine (Watermen's Museum 1991). The wood works easily and is beautifully marked making it a common choice for local furniture and interior architectural elements. Canoes of yellow pine were expected to last a lifetime (Green 1936:34).

The differences in construction methods are profound but not necessarily recognizable to the casual observer. This advance summary will emphasize the fundamental methodological differences.

- | | |
|-------------------------|---|
| Virginia Canoe Builders | <ol style="list-style-type: none"> 1. select straight log and logs with natural curvature for the canoe hulls 2. carve the center line, keel, stem, deadrise, wing logs and filler logs by eye 3. build one side at a time and match the other by eye 4. determine size and shape during construction |
| Maryland Canoe Builders | <ol style="list-style-type: none"> 1. build a half model and draft exact plans 2. select all straight logs 3. join all squared logs and work the hull in one piece 4. place station marks and guidelines and cut logs to exact shape with saws and adzes |



Figure 3 a. Yellow Pine, natural curvature b. Poquoson Canoe: hull upright and temporarily assembled c. Poquoson Canoe: half hull construction

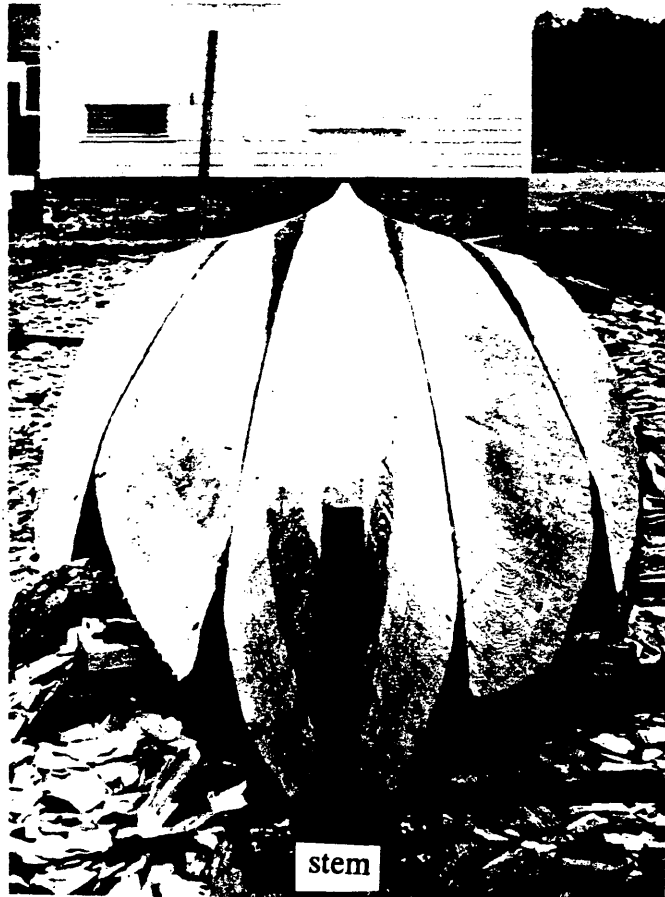
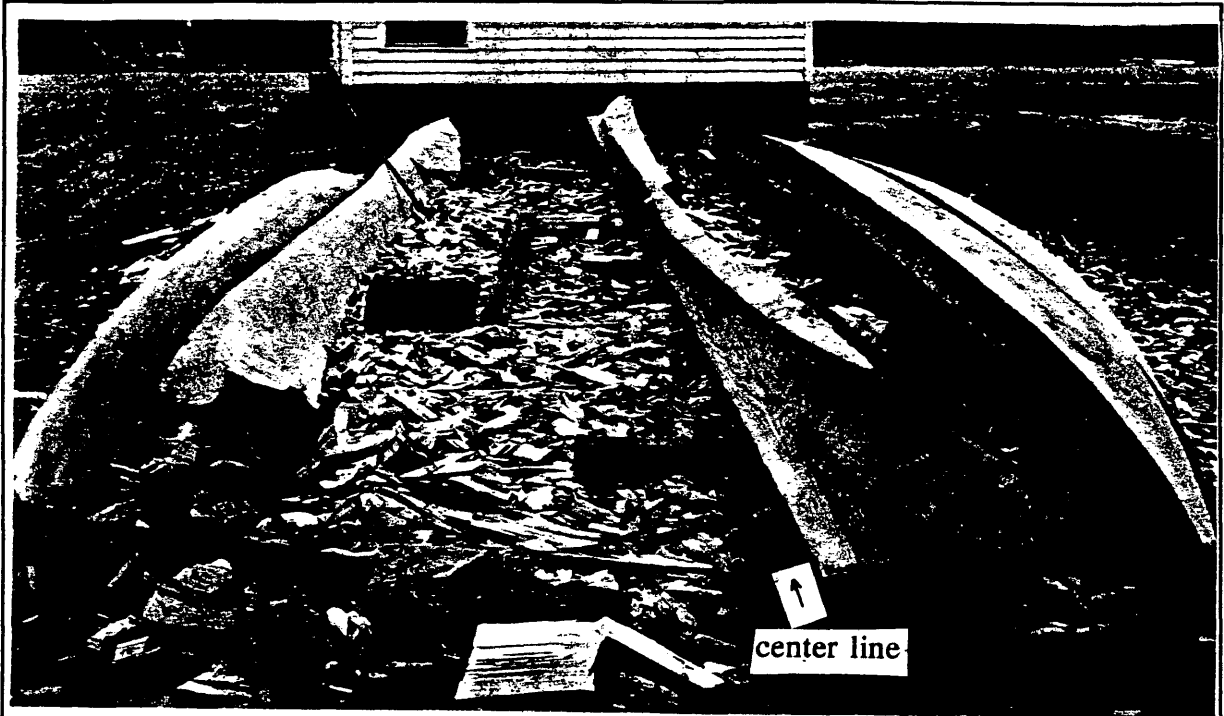


Figure 4 a Poquoson Canoe: five logs shaped and disassembled
b Poquoson Canoe: final assembly, overturned



Figure 5 a Poquoson Canoe: receiving filler logs
b Poquoson Canoe: complete hull

VIRGINIA CONSTRUCTION OF A FIVE LOG CANOE

The center log (long, large and straight) is carefully selected and felled. The long section of the trunk free of limbs is cut out and hauled to the building sight (usually a back yard). The limbed sections are saved, the naturally occurring knees cut out for later use as the canoe nears completion. The center log is hewed flat to create a timber square to the eye. By eye, the centerline, keel, stem and stern are marked off. "With broadaxe in hand and the canoe's design in mind the builder roughly points the ends" (Brewington 1937:7). On each side of the keel the builder hews the bottom to the approximate deadrise (upward slope). The second and third logs, the garboard logs are hewed square and then a single angle is cut in by eye on one face of each log to meet the curved surface of the bottom of the center log. With the center log on its side one garboard log is stacked on top with the angled surfaces meeting flush. Holes are bored and the center and one garboard log are temporarily joined with split locust or iron pins.

Unlike the others, the outer logs (4 and 5) called wing logs are selected for their natural curvature. The skilled eye of the builder matches the curvature of the log to the outward curve of the boats beam. The inside edge of the wing log is hewed flat, raised to proper height and temporarily pinned to the garboard log. The curvature of the wing log minimizes the necessary shaping of the boats outermost profile and limits the amount of end grain exposed to the weather, ropes and nets. The bottom is shaped by removing the chine and edges.

As one side is finished, the temporary pins are removed and the center log is flipped to allow the other side to be completed. Upon completion all five logs are then permanently reassembled in the upright position for final shaping and the addition of filler logs, knees, the masts seats, rigging and paint. Filler logs are used to close the gaps on the gunwale surface caused by the elevation of the garboard and wing logs. These boards are hewed from whole logs.

Brewington writes that "It is notable that not one of the many Virginia canoe builders questioned had ever made use of a half model or mould. As a result of this method, there is always some variation in the two sides of the hull. Consequently the canoe sails faster or closer to the wind on one tack than the other" (1937:8).

MARYLAND CONSTRUCTION OF A FIVE LOG CANOE

The first step in Maryland construction is to make or obtain a half model (a small wood model of a half hull) or drafted plans. In most cases these plans include the intended fully developed shape of each log in the canoe. Those Maryland builders not using plans built canoes considered inferior in quality. Their methods were known derogatorily as the "winchum squinchum" or "built by rack of eye" (Brewington 1937:14).

All five logs including the wing logs are selected for straightness, width and length. This is unlike the use of naturally curving wing logs of Poquoson Canoes. The five logs are all placed side by side and the keel and garboard logs are blocked to the proper height. The center log is the highest as the canoe is built up-side-down at first.

Crucial to the Maryland method is the joining of all five logs from the beginning of the process. This allows the keel line and the rake of the stern and stem to be marked

and the latter to be cut to shape precisely with a saw. As a result, the hull can be treated systematically and uniformly, model station marks are made over the entire bottom of the nascent hull. Successive hewing in planes and remarking of station lines slowly creates the shape of the symmetrical hull. The feathered gunwale edge is filled with sawed lumber not hewed timber as in Virginia. Adherence to the modeled plans insures the symmetrical hull equal speed and tightness on either tack.

Pocomoke (Worcester County) canoes were distinct in their inclusion of a straight stem post and lapstrake rising planks added to increase the boats freeboard. Like York County canoes, most Worcester canoes in the second half of the nineteenth century were painted for beautification and preservation.

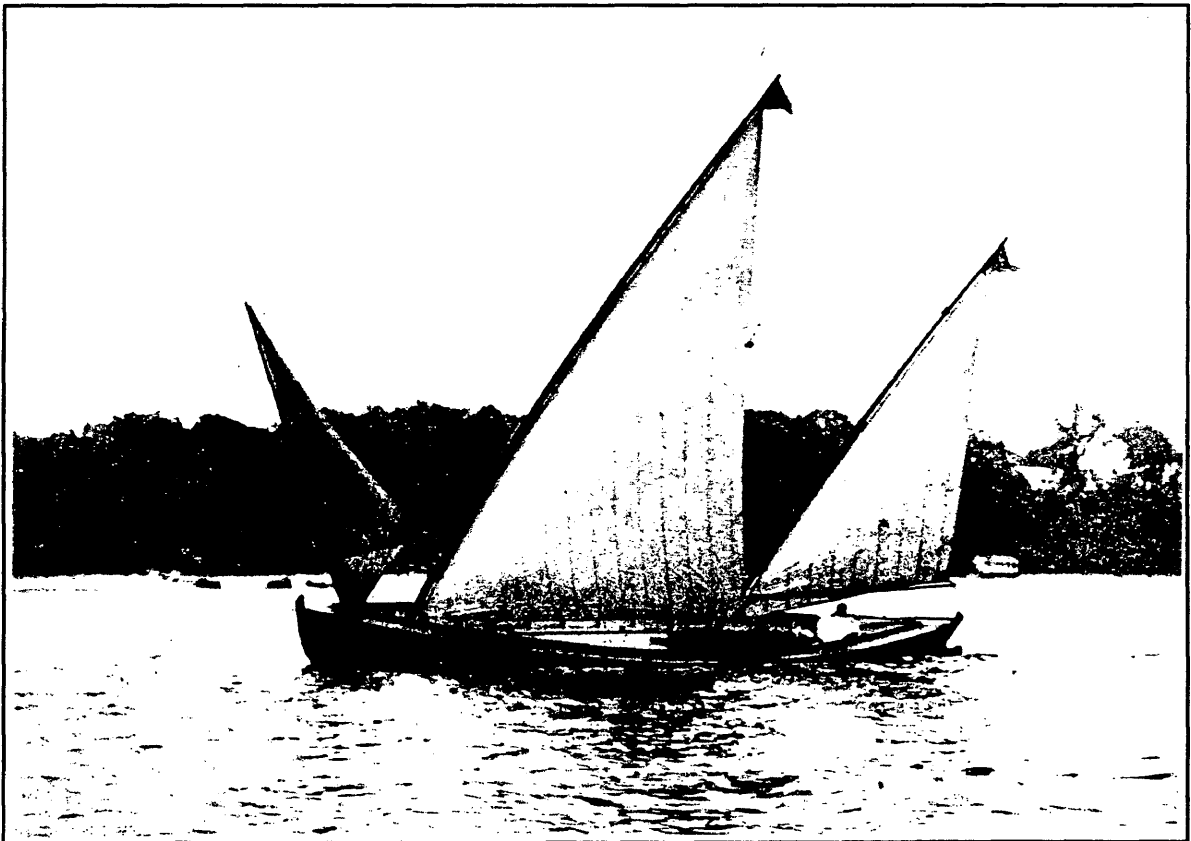


Figure 6 Pocomoke Canoe: Chesapeake Bay Log Canoe from Southern Maryland (photo: "The Mariners' Museum")

CHAPTER III

RESEARCH METHODS AND DATA

In general, little is known about nineteenth century York County water activity. However, several sources of documentary information from eighteenth and nineteenth century York County survive providing a rich repository of material cultural data related to these activities and their practitioners. Of these sources, the Federal Population Census and County Court produced inventories and lists of sales of the personal estates of decedents, otherwise known as probate inventories are the most direct data relevant to the ownership and use of the nineteenth century Chesapeake Bay Canoe. The Federal Population Census lists all free people by race, occupation (beginning in the early nineteenth century) and county. The probate inventory's provide a complete recording of a person's mobile material possessions at the time of death.

The methodology of this research is based upon the quantification of the log canoe, its accessories, adjectival modifiers and boats in general over ten year intervals in York County Virginia probate inventories (York County Wills and Inventories 1783-1889). York County census records for 1850 and 1870 were quantified according to categories of occupation and skin color (Federal Population Census, York County: 1850, 1880). These years were chosen purposefully to document pre- and post- emancipation canoe related occupations. Following Yentsch (1980), these data are analyzed in order to uncover changing patterns of material culture over time.

The data extracted from York County records is compared with census data from Worcester County, Maryland from the same years (Federal Population Census: Worcester

County 1850, 1880). A subset of the years of inventory records 1855-59 serves to contrast pre-emancipation patterns of canoe ownership between the two counties (Worcester County Wills and Inventories 1855-59). The purpose is to document the contribution of free and enslaved African-Americans to the evolution of the Chesapeake Bay Log Canoe. Establishing a cultural link between African-Americans and York County (Poquoson) canoe form and construction will enable the exploration of the social and cultural context of use and production.

This paper analyzes 498 York County inventories (1783-1889) the complete data sample for that period. Decedents' records often included both appraisals of estate and lists of sales. Lists of sales virtually mimicked the appraisals of estates in terms of the items listed and their descriptions. The list of sales differed only in that the monetary values were quotes of actual sale prices. Lists of sales were considered as inventory data when the actual inventory did not appear for the listed York County decedent.

The categories constructed for quantification are all boats by listed type, number of canoes per decedent and boat accessories such as sails, paddles and oars. Verbatim lists of the descriptive words attributed to the canoes were also recorded. The data was divided into ten year intervals to reveal patterns in material record and ownership over time. These intervals progressed with regularity until the ninth and tenth intervals. The ninth began with 1865 instead of 1860. No inventories exist (presumably they were not taken) during the Civil War. The tenth began in 1875 and ended with 1889 when the practice of probate inventory taking ceased in York County.

To compare ownership and use patterns between York County, Virginia and Worcester County Maryland, data was also quantified from the Worcester County

inventories. The complete data sample contained 241 inventories from the 1855-1859 pre-emancipation period. For the same five year period York County recorded 27 inventories, approximately 10% of those taken in Worcester County. Worcester County's free population far exceeded that of York County resulting in greater numbers of inventories.

The 1850 and 1880 Federal Census from both counties recorded descriptions of occupation and race of free adult males. Race and occupation data were quantified according to categories defined by the original census. Census takers defined race as White, Black and Mulatto. The records did not consistently record occupations of women and children. Therefore, analysis includes only males over age 16.

It is important to address the issue of bias inherent in inventory data introduced during the process of inventory recording. Several anthropologists discuss the limitations of probate data (Brown 1988; Carr and Walsh 1980). Two general categories of bias must be considered. The first is the degree to which the sample of decedents who had inventories recorded represents the total population of decedents. The second results from differences in procedures and attitudes of the appraisers. These biases must be recognized and regarded in the process of interpretation.

Comparison of the list of inventoried decedents to the county death records gives a ratio of inventories recorded per total deaths. The York County Death Registers for 1856 and 1858 (York County Death Register 1856, 1858) list the deaths of sixteen white men and 7 white women over the age of seventeen for the two years combined. Nine of the sixteen men (56%) and one of the seven women (14%) had their estates appraised. This example demonstrates the incomplete nature of the selection of decedents for

inventory recording.

Carr and Walsh note that inventoried decedents tend to be wealthier and older than average because "wealth tends to increase with age, and more old men than young men die in proportion to their numbers" (1980:83). The inventories from both counties provided this impression. This bias effectively eliminated records of less wealthy namely the independent oystermen, watermen and fishermen who built and used canoes to provide their daily catch. This negative evidence, is important to the interpretation of the positive inventory data.

In general the inventories analyzed listed a great range of items including relatively valueless items such as "a single fish" (York County Wills and Inventories 1783-1811:Book 23) scrap iron, broken tools and old boats valued at just a few cents. It is safe to assume then that comparatively valuable canoes would be included if they existed regardless of the attitude of the appraiser.

The recording process produced a complete list of an individuals possessions. The county hired recorder was naive to the possibility that the inventories would be used for purposes other than those originally intended. This is a strength of the probate inventory as a data source for material culture research. In statistical terms this naivety is referred to as a blind condition. Modern researchers have no more opportunity to bias the nineteenth century recording process than the long dead county recorders have of intentionally influencing current research.

CHAPTER IV

RESULTS

The canoe remained the most popular boat type in York County throughout the examined period of 1780-1889. The minimal water displacement and sharp long lines endow the canoe with speed and a great range of mobility necessary for oystering. Oystering is a shallow water activity as oysters grow only in depths under 50 feet and most typically in shallow tidal waters (The Watermen's Museum 1991). It is for practical

Period	Canoe	Punt	Schooner	Other	Sum
1780-1789	12	0	0	0	12
1790-1799	14	0	0	0	14
1800-1809	21	0	1	0	22
1810-1819	31	1	1	6	39
1820-1829	29	1	2	3	35
1830-1839	30	1	1	6	38
1840-1849	27	2	1	2	32
1850-1859	21	4	0	4	29
1865-1874	1	3	0	2	6
1875-1889	4	1	3	4	12
Total	190	13	9	27	239
% of Total	79.5	5.4	3.8	11.3	100

Table 1. Boats by Type from Inventories, York County, Virginia 1780-1889

reasons that the canoe was adapted to the demands of the nineteenth century Virginia oystering industry.

York County people relied most heavily on the log canoes' service. The 498 inventories appraised from 1780-1889 listed four types of boats: canoes, punts (a small form of the log canoe typically used to tend larger boats), schooners and miscellaneous

boats (see Table 1). Of the 239 total boats listed, 190 or 78.5% are canoes, 13 or 5.4% are punts, 9 or 3.8% are schooners and 27 or 11.3% are miscellaneous boats. The inventory record dramatically illustrates the predominance of the canoe throughout the century, 83.9% of the boats recorded.

If African-American slaves worked building and operating these many York County log canoes, this should be reflected in the probate inventories of wealthy white men. The frequency of inventories containing canoes in pre- and post- American Civil War periods shows a significant trend. The results are listed in Table 2.

Period	Inventories	With at least one canoe	% with at least one canoe	With two or more canoes	% of inventories with canoes that contain more than one canoe	% inventories of female decedents
1780-1789	60	10	16.67	2	20	3.3
1790-1799	27	8	29.63	1	12.5	7.4
1800-1810	48	14	29.17	5	35.71	6.3
1810-1819	77	23	29.87	5	21.74	10.4
1820-1829	68	21	30.88	5	23.81	14.7
1830-1839	56	17	30.36	8	47.06	8.9
1840-1849	50	15	30	5	33.34	18
1850-1859	52	16	30.77	5	31.25	11.5
1865-1874	34	1	2.9	0	0	20.6
1875-1889	26	4	15.38	0	0	5.4
Total	498	129		35		
% of Total	100	25.9		27.13		

Table 2. Probate Inventory Content and Characteristics, York County, Virginia

The seven, ten year periods immediately before the Civil War demonstrated a 30% rate of ownership of at least one canoe. This rate dropped to 2.9% in the first post war period, rebounding somewhat to 15.38% in the last. One would expect the 24 year post war period to be time to replenish the county's boat supply. A partial restoration occurs in the tenth period.

It is probable that newly emancipated slaves acquired the canoes of their former owners or built new canoes for themselves. This would have effectively remove the canoes from the inventories of White York County residents. Given that African-American estates were not appraised, any boats built and acquired in their lifetimes remained un-recorded.

The pre-emancipation inventories contained records of two general types of canoe owners. Individuals such as Alfred Baiggs owned a single canoe, oyster tongs and one-hundred and twenty baskets of oysters (York County Wills and Inventories 1858). He appears to have been an oysterman and an exception; very few non-wealthy, non-land owners had estate inventories compiled. Others such as Seymore Powell were farmers owning substantial quantities of slaves, live stock, oxen, ploughs and one or many canoes (York County Wills and Inventories 1838). Mr. Powell owned six canoes.

Determining the focus of each decedent's occupation was rather easily done by visual inspection even in inventories involving diverse items such as canoes and ploughs and retail store merchandise. The majority of the inventories containing canoes are of decedents who's full-time occupations appeared to have been farming.

Megan Mulrooney examined the 133 York County inventories from 1853 to 1889 (Mulrooney 1990). She identified the occupation of 26 of the 39 decedents owning

oystering/fishing gear (including canoes) by consulting the most recent relevant census record. Seventy percent of the decedents identified as farmers owned oystering equipment. Mulrooney concluded that "While farmers clearly supplemented their income by harvesting oysters on a seasonal basis, the extent to which oystermen farmed is unknown" (Mulrooney 1990:21).

The conclusion that farmers supplemented their incomes with oystering is validated by the ownership patterns seen in York County inventories. One-hundred percent of the post-emancipation inventories containing canoes contain only one canoe. In the absence of slave labor, a farmer and son or neighbor could personally operate a seasonal supplemental oystering business with a single canoe.

The pre-war inventory record supports an interpretation other than personal supplementation (see Table 2). Thirty-five (28%) of the 124 pre-war inventories listing canoes contained two or more canoes. Farmers and shopkeepers owned fleets of 2 to 6 canoes. This clustering of canoes in single inventories indicates oystering activity that exceeds supplementation and suggests commercial harvesting. Given that a standard crew on a canoe is two people, it would not seem appropriate for one man to own more than one canoe unless he had control of large quantities of labor.

Oystering from a canoe was divided into two tasks, one tending the tiller and sails or oars, the other pulling oysters from the shallow waters. An ambitious two man crew could tong 60 bushels in a day in a 30 foot canoe (Green 1936:38). Clusters of canoes implicate the presence of large quantities of labor, most likely slave labor. The presence of even a single canoe in the inventory of a wealthy man is in itself a likely marker for slave/hired labor.

Period	Cyprus Canoe	Batteau	Scow	Schooner	Ferryboat	Fishing Boat w/oars	Skiff	Boat	Row boat	Sum
1855-1859	1	10	1	7	1	1	1	9	1	32
% of Total	3.1	31.25	3.1	21.87	3.1	3.1	3.1	28.13	3.1	100

Table 3. Boats by Type from Inventories, Worcester County, Maryland 1855-1859

Reviewing the frequency of types of boats extracted from the inventory records demonstrates the predominance of the canoe in York County, Virginia and an absence of the canoe in Worcester County, Maryland throughout the nineteenth century. Pre-emancipation York County inventories produce a pattern of White farmers owning canoes and frequently small groups of canoes. The slave labor available to wealthy White men implies an African-American presence in the use and the manufacture of the canoes. Post-emancipation inventories contain no multiple canoe ownership and few canoes in general.

The population census lists document the majority of York County free Blacks working as oystermen and canoe related occupations and their majority in those occupations after emancipation. In contrast, Worcester County, Maryland census records show oystering and canoe related occupations only after emancipation and indicate a very low number of African-American participants.

Unfortunately, no slave in any of the inventories from 1780 to 1860 was given a description of skill. The presence of skills is evident only in the monetary appraisal of each slave. Slaves involvement in the use and construction of York County canoes must

be inferred from the 1880 census listing. Slave involvement is consistent with the grouping of canoes in inventories and with the labor-intensive demands that distinguish log canoe construction. Farmers had ready access to slave labor and not necessarily access to conventional ship yards and materials. The "unfinished canoe" in Charles Hopkins' inventory (York County Wills and Inventories 1839) indicates the 'backyard', homemade nature of log canoes.

Direct evidence of the water and canoe making skills of African-Americans exists in occasional mention in oral history, advertisements, and inventories. An oral history "collected by the late Dr. O. T. Amory of the Mariners' Museum asserts that a slave named Aaron, who belonged to John Dennis of York County, Virginia, built the first two- and three-log canoes on Lamb's Creek sometime in the late eighteenth century" (Vlach 1978:102). The popularity of the log canoe and the large slave and freed-slave population in York County suggests a connection between African-Americans, the canoe and their involvement in the use of the canoes for oystering and fishing.

The 1880 York County Census offered concrete support for the assertion that African-Americans operated and perhaps owned a significant portion of York County canoes. The census listed four occupations directly pertaining to oystering and fishing and possible canoe use: oysterman, waterman, and fisherman and boatman. The individual totals are listed in Table 4. Nearly twice as many African-Americans as White-Americans recorded oystering/fishing occupations. When Blacks and Mulattos are grouped, the ratio jumps to 7 to every 3 Whites. The African-American independent participation in York County canoe related occupations is very clear. As a result we can infer more confidently that the drop in post-emancipation canoe appraisals was in part a

Occupation	1850 York County Census				1880 York County Census			
	Black	White	Mulatto	Sum	Black	White	Mulatto	Sum
Oysterman	27	29	20	76	29	9	10	48
Fisherman	2	7	5	14	4	7	1	12
Waterman	0	0	0	0	2	3	0	5
Boatman	0	0	0	0	6	2	0	8
Oysterman/ farmer	0	1	0	1	0	0	0	0
Fisherman/ farmer	0	0	0	0	0	0	0	0
Sum	29	37	25	91	41	21	11	73
% of total	31.87	40.66	27.47	100	56.16	28.77	15.07	100

Table 4. Canoe Related Occupations 1850, 1880, York County, Virginia

result of African-Americans' independent participation in the oystering/fishing industry and ownership of their own canoes which went unrecorded.

Canoe construction, operation and tidewater navigation are highly skilled activities. Following the Civil War, former slaves took to the water and its profits. It is improbable that anyone could have survived in the industry without the extensive experience and resultant skills that these activities required. Therefore, it is reasonable to infer that many York County African-Americans were heavily involved in the same water related activities prior to their emancipation.

Thirty years later 172 individuals were listed as oystermen in the 1880 census. The acceleration of the oystering industry in the second half of the century undoubtedly led to the log canoe's popularity here and quickly to Pocomoke Bay's centrality in canoe production.

While not directly documented in York County inventories, slave involvement in water activity has precedent in the Caribbean and other Southern States where log canoes and bateaux were built. "In 1741, one (South Carolina) slave owner advertised two blacks as a pair 'that is capable to go in a Pettiauger, and has practis'd going by Water above 10 Years and understand their Business as well as most of their colour'" (Vlach 1978:101). More immediate evidence comes from John Thomson of York County who included in his 1768 will "several valuable water Negroes, one of them an extraordinary good sail maker" (Vlach 1978:102).

The 1850 and 1880 York County censuses provide direct evidence for African-American domination of log canoe use and oystering (see Table 6). Twenty-seven of the 61 free adult Black men recorded in the 1850 York County census (44%) declared "oysterman" as their primary occupation, Mulattos 20 of 52 (39%), and Whites 29 of 438 (6.6%). Therefore, 36% of the 72 oystermen were Black, and 28% Mulatto. While Whites made up 80% of the adult male population only 40% of oystermen were White. The fact that 17 of the 17 sailors were white indicates that Blacks were not active in water related work in general. Their affinity toward oystering most likely reflects an intimate knowledge of the construction and navigation of log canoes. The post-emancipation percentages are even more striking Whites comprising only 9 (19%) of the 48 oystermen while Blacks held the majority with 29 (60%) and Mulattos with 10 (21%).

These facts lead to the firm conclusion that the African-Americans built their own or helped each other build log canoes. In the absence of written history this strong evidence marks the Chesapeake Bay Log Canoe as a genuine component of African-American material culture. The evidence also shows that African-Americans were skilled

and vital participants in the development of the York County oystering industry and the Chesapeake Bay Log Canoe.

Worcester County, Maryland inventories recorded from 1855-1859 indicate a markedly different economy and approach to oystering and boat use (see Table 5). Seventeen of the 241 decedents owned boats. Only one of the boats was a canoe. This eliminates the possibility of slave owners owning small fleets of canoes and the likelihood of slaves working as oystermen for their masters prior to the Civil War. It is possible that the county clerk taking these inventories called canoes either boats or bateaux. If this is the case, 3 decedents, 5.7% of those owning boats and 0.8% of all decedents owned 2 or more watercraft that could be used for oystering and fishing .

Period	Inventories	With at least one canoe	% with at least one canoe	With two or more canoes	With Boat	% with at least one boat	With two or more boats	% with two or more boats
1855-1859	241	1	0.41	0	17	7.01	10	58.87

Table 5. Probate Inventory Content and Characteristics, Worcester County, Maryland

These lean numbers suggest that only free White or African-American men too poor to have estate inventories owned and operated the oystering and fishing canoes.

"Bateaux" and "boats" probably precede the popular appearance of the log canoe in Worcester. Land-owning, upper-class men could rely on these small craft for transportation and movement of goods. Canoes of small scale farmers supplementing diet and income with oystering would not appear in the inventories.

Occupation	1850 Worcester County Census				1880 Worcester County Census			
	Black	White	Mulatto	Sum	Black	White	Mulatto	Sum
Oysterman	0	0	0	0	44	128	0	152
Fisherman	1	3	0	4	0	20	0	20
Waterman	0	1	0	1	0	0	0	0
Boatman	16	24	0	40	0	0	0	0
Oysterman/ farmer	0	0	0	0	0	6	0	6
Fisherman/ farmer	0	0	0	0	1	1	0	2
Sum	17	28	0	45	45	155	0	180
% of total	37.78	62.22	0	100	25	86.11	0	100

Table 6. Canoe Related Occupations 1850, 1880, Worcester County, Maryland

The data suggests that oystering did not transcend small scale supplementation in Worcester until the second half of the nineteenth century. Therefore no widespread investment in log production is evident. In the 1850 Worcester census there were no oystermen; individuals may not have specialized in oysters as a source of income. Perhaps diverse quarry such as fish, clams and crab, would lead oystermen to declare themselves as one of the 40 boatmen (24 Whites and 16 Blacks) found in the census (see Table 6).

The land encompassed by Worcester County has a peculiar history that precluded large plantation estates, massive slave holdings and the associated economy. Mid-17th century settlers acquired immense 2000-3000 acre tracts by headright from the Royal Colony of Virginia (acting on the conviction that the land was in Virginia's territory).

County, Year	Black	White	Mulatto	Sum	Number of Occupations
York 1850	61	438	52	551	36
York 1880	647	553	68	1,268	65
Worcester 1850	330	3,217	22	3,572	83
Worcester 1880	1,832	3,036	94	4,986	174

Table 7. Free Adult Male Population, York County and Worcester County 1850 and 1880

The finalization of the state line in 1668 contradicted this assumption and precipitated patent renegotiation. The new distribution of "land rights" allotted 100 acres per adult and 50 per child comparatively small plots. As settlement accelerated Lord Baltimore in 1684 made provisions for newcomers to buy small tracts of land suitable for private family farms. This practice and the "landright" of 1668 set precedent for small scale family farming that has been typical of Worcester County into the 20th century (Truit 1977:231).

The small land holdings in Worcester yielded a significantly larger population than that in York County. The concentration of people produced a more specialized economy. The 83 declared occupations in 1850 and 175 in 1880 more than double York County's 36 occupations in 1850 and 63 in 1880. Maryland was a slave state bordering industrialized Northern states. The high number of occupations and the high ratio of Whites to slaves and free African-Americans to slaves was consistent with Maryland's mixture of specialized economy, as well as the ambivalence toward slavery and legal slave labor (see Table 7). Without large plantations the slave community in Worcester

was fragmented and dispersed, weakening its cultural continuity and limiting the numbers of slaves sent to the Bay for oysters and fish.

CHAPTER V

DISCUSSION

The results drawn from the probate inventory and census data show that York County African-Americans accounted for the majority of that county's oystermen and that county's canoe users. While the makers of these canoes can only be inferred, documentary and ethnographic data, and the contrast between the two canoe styles makes it likely that the African-Americans built the York County canoes.

In addition to physical labor and skill, Africans brought cultural values that affected the way they built canoes and ultimately the way the canoes appeared. African-American material culture reveals a value of improvisation and constant spontaneous change. This is widely seen and recognized in music, story telling and other traditional material mediums. John Vlach writes "The extensive sense of improvisation commonplace in the Afro-American experience is rather special. In this case, spontaneous change represents a cultural norm rather than single independent inventions" (1991:5). Each York County log canoe was a unique product of its builder's eye and mental plan. This construction method is found in no other Chesapeake Bay boat type. The simultaneous presence of the African-American oystermen population and the seemingly African construction style suggests more than a coincidental link.

There is an interdependent relationship between understanding an African-American world view and understanding African-American material culture. A concept recognized as universal to almost all eighteenth and nineteenth century African-American

culture is constant individuating improvisation and adaptation. This same characteristic is also common to African art. According to Vlach, "It is an integral part of the process of African art to constantly reshape the old and the familiar into something contemporary and unique" (1991:5). This African-American cultural concept is linked to traditional West African cultures through continuities in material culture. The non-symmetry and originality of each York County canoe is perfectly congruous with African-American cultural norms which in part define a unique world view.

While it is argued that the conditions of slavery abolished ties between African-Americans and their African heritage (e.g. Kulikoff 1986) this paper presents the York County Chesapeake Bay Log Canoe as evidence of a cultural link.

Improvisation in African-American canoe building conferred the important advantage of flexibility in the final size and form of the canoe. This flexibility permitted free and enslaved African-Americans to build canoes adapted to the particular work-related demands. The rapid expansion of the oystering industry in the Southern Chesapeake demanded larger, swifter and more rugged boats. Some were to be suited for long distance travel to markets, some to shallow water tonging, and others to small scale personal or family use. African-American canoe builders were free to create swiftly and skillfully in a manner both familiar and natural to their way of thinking.

In contrast, Georgian material culture reflects values based upon principles of control over nature, order, and standardization. This is readily reflected in Georgian material culture in the form of rigid symmetry, exact repetition of elements, reproducible form and a cannons proportion, texture, color and size. The Worcester County canoe, symmetrical, and built predominantly by Whites from written plans and models reflects, the Georgian ideal.

Glassie and Deetz have enumerated cognitive dualities believed to be inherent in the Georgian World View. The first term in each of the following pairs is the positive value in the binary relationship. Intellect opposes emotion; culture, nature; private, public; control, chaos; and symmetry, non-symmetry (Glassie 1972:268-79; Deetz 1978:40-43). Leone (1988:212) capsulized the essence of Georgian culture as a striving for balance, order, symmetry, segmentation, and standardization.

York County African-Americans were intimately linked with the powerful controlling group not solely by virtue of sharing a society but more importantly by an antagonism that defines their difference. In a capitalistic society where interaction is based upon mutual contract between people controlling varying amounts of capital and goods, the ultimate social goal takes the form of the acquisition of capital and the personal independence it affords (Isaac 1982). Slaves and women were not allowed to compete for capital gain although forced to participate in the system as dependents of White men. Having some means to escape the contractual subordination of oneself results in individual independence and thereby confers social and psychological power. York County African-Americans used the log canoe in addition to other forms of African inspired material culture as a means gaining independence and an alternative cultural identity within the context of slavery.

The African-American use of the log canoe for oystering was an isolated activity conducted miles from the view of the plantation and other centers of white power. The freedom of the open water and canoe use required of African-Americans provided temporary independence, an experience valued in Georgian perception. White men pursued symbolic behavior representative of their quest for individual importance; the

wild forests became the popular symbolic place for White men to seek their individuality (Isaac 1986:301). Independence was coveted by and reserved for the wealthy. However, the slave owner was bound to the profits derived from the skills and labor of the slave as oystermen and fishermen and could not address the conceptual threat of the African-American's daily routine. The African-American must have benefitted from the relative independence derived from their skills in canoe building and use.

The African-American traits found in York County canoes linked nineteenth century African-Americans with their African heritage and identity. Those same traits represent an antithesis of Georgian structural values of symmetry and order. Because their daily existence was based upon the forced service to the demands of the White culture, slaves and free African-Americans must have been aware of these cultural values of the dominant White class. By practicing canoe building according to African-American principles the process and product can be seen as form of subterfuge. While the York County log canoe met the functional demands of the slave owners, the possession of log canoe building skills empowered African-Americans to create and style the canoes according to African-American cultural perceptions. The York County Chesapeake Bay Log Canoe is evidence of a distinct world view of an established African-American culture.

CHAPTER VI

CONCLUSION

Slaves imported to the Americas possessed canoe related skills and a heritage of canoe building and use. People of each local culture produced canoe types specific to the cultural perceptions and waterways on which they worked. The European introduction of iron tools greatly expanded the formal possibilities that creative canoe builders could explore. African-Americans contributed ideas and innovations resulting in modification of the log canoe form.

The nineteenth century development of the Chesapeake Bay oystering industry led to change in the log canoe. The canoes became large and sophisticated to meet the demands of growing competition and catches warranting the distinct appellation of "Chesapeake Bay Log Canoe". The average canoe contained five logs joined side by side with water tight seams. Unlike any other vessel form, the log canoe was not dependent on capital investment, but they were almost solely dependent on skilled labor.

Nineteenth century probate inventories and population census provide positive evidence for attributing the use of York County Chesapeake Bay Log Canoes to York County African-Americans. The assumption that the African-American oystermen made the canoes they used is based upon the West African cultural heritage of canoe use, the uniquely African nature of the asymmetrical, improvised York County canoe form, and the documentary evidence of African-American occupations before and after emancipation.

York County, Virginia and Worcester County Maryland garnered fame as

nineteenth century centers of Chesapeake Bay Log Canoe production. Each county produced log canoes unique in form and method. York County log canoes were built by eye without plans. The resulting canoes were slightly asymmetrical sailing faster on one tack than the other. Conversely, Worcester County canoes were symmetrically built from measured models.

York County probate inventories taken from 1780 to 1889 document canoe ownership patterns that implicate slave labor in log canoe production and use. The majority of farm owners in the pre-emancipation period also owned canoes and many owned small fleets of up to six canoes. The relative absence of canoes in the post-emancipation York County inventories may imply that African-Americans owned and operated most of the canoes. These canoes did not show up in the inventories because their owners were not included in the inventory process which generally only applied to wealthy men. York County census occupational data from the 1850 and 1880 population census directly support the high level of African-American involvement in the canoe related occupations of oysterman, fisherman, waterman, and boatman.

Comparison of York County, Virginia data with similar data from Worcester County, Maryland revealed a virtual absence of canoes in Worcester in the first half of the nineteenth century and few African-Americans involved in canoe related occupations. This suggests that White boat builders of Maryland adopted the canoe in response to oystering demands in the second half of the nineteenth century.

The York County canoe had multiple meanings for its African-American builders and sailors. Primarily, slaves and free African-Americans gained access to the oyster beds, fishing grounds and markets either in meeting the demands of White slave owners

or in providing an independent living. The canoe could also have served a symbolic function, marking the African and African-American heritage of its makers and users.

The innovation and spontaneous change typical of African-American material culture is the hallmark of the York County canoe. The expression of these African and African-American values conflicted with the Georgian value system of the dominating White class. Symmetry as it reflects order, and the organization of the natural and physical world into the realm of cultural control is crucial to the maintenance of the Georgian world view. African-Americans expressed their own culturally valued ideas about spacial order, creativity and physical form. Their skills and innovations influenced the development of the Chesapeake Bay Log Canoe and profoundly benefited the Chesapeake Bay oystering industry.

BIBLIOGRAPHY

Adney, Edwin Tappen, and Howard I. Chapelle

1983 *The Bark Canoes and Skin Boats of North America*. Washington, D.C.: Smithsonian Institute Press.

Brewington, M.V.

1937 *Chesapeake Bay Log Canoes (Part One)*. Newport News, VA: The Mariners' Museum.

1937a *Chesapeake Bay Log Canoes (Part Two)*. Newport News, VA: The Mariners' Museum.

1941 *Chesapeake Bay Bugeyes*. Newport News, VA: The Mariners' Museum.

Brown, Marley R.

1988 *The Behavioral Context of Probate Inventories: An Example from Plymouth Colony*. In *Documentary Archaeology in the New World*. M. Beaudry, ed. Pp. 79-82. Cambridge: University of Cambridge Press.

Burley, David V.

1989 *Function, Meaning and Context: Ambiguities in Ceramic Use by the Hivernant Metis of the Northwest Plains*. *Historical Archaeology* 23(1):97-106.

Carr, Lois, and Lorena Walsh

1980 *Inventories and the Analysis of Wealth and Consumption Patterns in St. Mary's City County, Maryland, 1658-1777*. *Historical Methods* 13(2):81-104.

The Colonial Williamsburg Foundation: Department of Archaeology, Office of Archaeological Excavation

1986 *Toward a Resource Protection Process: James City County, York County, City of Poquoson, and City of Williamsburg*. Williamsburg, VA.

Cook, David S.

1985 *Above the Gravel Bar: the Indian Canoe Routes of Maine*. Milo, ME: Milo Printing Company.

Davis, William A.

1897 *The Chesapeake Bay Canoe: Its Evolution from the Dugout*. *The Ruder* 21:350-355.

Deetz, James

1977 *In Small Things Forgotten*. New York: Doubleday.

Federal Population Census

1850 Worcester County, Maryland. State Archives, Annapolis, MD.

1850 York County, Virginia. State Archives, Richmond, VA.

1880 Worcester County, Maryland. State Archives, Annapolis, MD.

1880 York County, Virginia. State Archives, Richmond, VA.

Garba, Malam Abubakar Garba, Malam Y. Mukhtar, and Malam I. M. Waziri

1988 Guidelines for Dufuna Canoe Discovery Project, Centre for Trans-Saharan Studies. University of Maiduguri.

Gillmer, Thomas C.

1972 Working Watercraft: A Survey of the Surviving Local Boats of Europe and America. London: Patrick Stephens Limited PSL.

Glassie, Henry

1975 Folk Housing in Middle Virginia. Knoxville: University of Tennessee Press.

Greene, Commodore William H.

1936 History of Chesapeake Bay Log Canoe. In St. Michaels Comet. Pp.37-40. St Michaels, MD.

Holloway, Joseph E.

1990 Africanisms in American Culture. Indianapolis, IN: Indiana University Press.

Isaac, Rhys

1982 The Transformation of Virginia. Chapel Hill: The University of North Carolina Press.

Kulikoff, Allan

1986 Tobacco and Slaves: the Development of Southern Cultures in the Chesapeake 1680-1800. Chapel Hill: The University of North Carolina Press.

Leone, Mark, and Parker Potter Jr.

1988 Introduction: Issues in Historical Archaeology. In The Recovery of Meaning: Historical Archaeology in the Eastern United States. M.P. Leone, and P.B. Potter Jr., eds. Washington D.C.: Smithsonian Institution.

Mulrooney, Megan

1990 Final Paper. Anth. 566. Williamsburg, VA: The College of William and Mary. Unpublished.

The Newport News (author unknown)

1938 Chesapeake Bay Log Canoe Being Built Here: Art of Making Vessels Gradually Being Lost. In The Newport News. Sunday Morning, Jan. 16. Article file: Canoes. Newport News, VA: The Mariners' Museum.

Praetzellis, Adrian, Mary Praetzellis, and Marley Brown III

1987 *Artifacts as Symbols of Identity: An Example from Sacramento's Gold Rush Era Chinese Community*. In *Living in Cities*. Society for Historical Archaeology Special Publication no 5. Staski, ed. Pp. 38-47.

Rowntree, Lester B., and Margaret W. Conkey

1980 *Symbolism and the Cultural Landscape*. *Annals of the Association of American Geographers* 70(4):459-474.

Smith, Robert

1970 *The Canoe in West African History*. *The Journal of African History* xi(1):515-533.

Shackelton, P., and K.G. Roberts

1983 *The Canoe: A History of the Craft from Panama to the Arctic*. Toronto: MacMillian of Canada.

Sobel, Mechal

1987 *The World They Made Together*. New Jersey: Princeton University Press.

Southern Chesapeake Bay (Map)

1987 Alexandria, VA: ADC of Alexandria, Inc.

Thompson, Robert Farris

1983 *Flash of the Spirit*. New York: Random House, Inc.

Truitt, Reginald V., and Les Callette

1977 Chapter VIII, *Agro-Industry*. In *Worcester County, Maryland's Arcadia*. Pp. 230-287. Snow Hill, MD: Worcester County Historical Society.

Virginia Department of Agriculture

1893 and 1906 *Virginia: A Handbook* 181. Cited in M. Mulrooney 1990 Final Paper. Anth. 566. Williamsburg, VA: The College of William and Mary. Unpublished.

Vlach, John M.

1978 *Boatbuilding*. In *The Afro-American Tradition in Decorative Arts*. J. Vlach, ed. Pp. 68-93. Cleveland, OH: The Cleveland Museum of Art.

1986 *The Shotgun House: An African Architectural Legacy*. In *Common Places, Readings in American Vernacular Architecture*. D. Upton, and J. Vlach, eds. Pp. 58-78. Athens, GA: The University of Georgian Press.

1991 *By the Work of Their Hands: Studies in Afro-American Folklife*. Ann Arbor, MI: UMI Research Press.

The Watermen's Museum
1991 Yorktown, VA.

Wennersten, John R.

1978 The Almighty Oyster: A Saga of Old Somerset and the Eastern Shore, 1850-1920. Maryland Historical Magazine 74(1):80-93.

Worcester County Wills and Inventories

1855-1857 GBG#5.

1857-1859 GBG#9.

Original on Microfilm. State Archives, Annapolis, MD.

Yentsch, Anne E.

1988 Farming, Fishing, Whaling, Trading: Land and Sea as Resources on Eighteenth-Century Cape Cod. In Documentary Archaeology in the New World. M. Beaudry, ed. Pp. 138-160. Cambridge: University of Cambridge Press.

York County

1783-1811 Wills and Inventories Book 23.

1811-1824 Wills Book 10.

1825-1833 Wills Book 11.

1834-1852 Wills Book 12.

1853-1864 Wills Book 13.

1865-1889 Wills Book 14.

Original on Microfilm. Colonial Williamsburg Foundation Library, Williamsburg, VA.

York Count Register of Births and Deaths

1856, 1858 York County Court House. York County, VA.

Young, Ulysses

1940 Distribution of Watercraft in Africa. University of Pennsylvania. Unpublished Masters Thesis.

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