

**THE MONETARY MATERIAL CULTURE OF  
PLANTATION LIFE:  
A STUDY OF COINS AT MONTICELLO**

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A Thesis

Presented to

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In Partial Fulfillment

Of the Requirements for the Degree of  
Master of Arts

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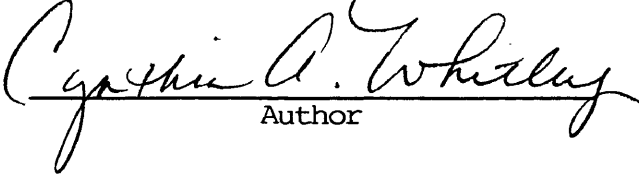
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## ABSTRACT

The nature of coins as part of a particular monetary system in history and later as part of the archaeological record of an historic site makes coins complex artifacts to study. Long residuality of coins in the system, uneven lifetimes of different denominations, unequal survival and recovery of coins, and the fact that most coins were arbitrarily lost rather than broken, disallows standard rules for artifact interpretation. As a result, archaeology has not granted coins their fullest potential, using the isolated coin find only as a dating tool.

As part of the material culture of an historic site, coins have interpretive value extending beyond mere use as dating tools, especially when examined in conjunction with the historical record. Coins assume their rightful position alongside other artifact types as useful objects with which to study a site. Forty-three coins excavated over a twelve year period at Monticello Plantation in Albemarle County, Virginia provided the database.

A graphics study was conducted of the coins using Harvard Graphics software on a PC computer. The objective was two-fold: to determine whether patterns could be visually depicted for a group of coin finds, and to explain the resulting patterns archaeologically and historically. Different combinations of the variables of coin date, context, metal content, size of coin, denomination, site location and layer depth were plotted on X-Y graphs. The resulting series of graphs revealed visible coin patterns for which inferences about site occupation, chronology, layer dating, occupant status, artifact deposition and the historical significance of coins can be made.

Coin analysis such as this helps establish a comparative database for studying coins found on similar well-documented and undocumented historical sites.

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## CHAPTER ONE

### INTRODUCTION

With the growth of material culture studies, increasing numbers of historians and students of other disciplines have come to rely on material objects in their studies. Coins exemplify how the once separate fields of numismatics, history and archaeology have come to rely on each others' knowledge. Heavy dependence solely on the written word is making way for studying the object itself as a powerful historic document in its own right. It is the purpose of this paper to show that as part of the material culture of an historic site, coins have interpretive value extending beyond mere use as dating tools, especially when examined in conjunction with the historical record. Coins can delimit site occupation, serve as markers of historical events such as changes in money systems, and act as indicators of social status. The database is forty-three coins excavated at Monticello plantation in Albemarle County, Virginia.

Coins have much information to give, particularly coins excavated on historical sites. A zone-by-zone comparison can isolate the specific areas of coin use and loss, which may be related to the function of the area or building. Coins may also infer economic status of the occupants. Types of coinage might define trade patterns; a change in types could show disruption of

trade patterns or perhaps a change in monetary systems. Coins can also test the reliability of the historical record at historic sites. Does the presence or absence of certain types of coins support economic policies in effect at the time? Do coin values found reflect the level of wealth in the colony and/or on the plantation? Does coin distribution reflect high and low periods of activity at the site? Coins are sometimes the best-surviving, intact, record of events that a site can produce.

In the past, studies have not granted coins their fullest potential. Coin hoards, as opposed to the isolated coin find have been the favorite database for numismatists, historians and archaeologists alike. Numismatists have used coin hoards to provide sequence dating (Laing 1969:63), to establish how long issues remained in circulation and how far they travelled (Macdonald 1903:297) and to produce information on composition of coins and source of metals (Casey 1986:129). Historians have focused on the symbols stamped on coins in hoards to reflect a sequence of historical events, for example money systems through time. Archaeologists claim to like hoards for site dating purposes, although the majority of books and articles written by archaeologists until recently were little different than numismatic classical coin chronologies.

Numismatists, historians and archaeologists are now beginning to reassess coins and are seeking to better understand the broader

economic aspects of coins. It is no longer enough to merely catalogue coins. Instead of studies conducted within the confines of each separate field, new studies are emerging which incorporate the professional tools of each field: the numismatist's identification skills about coin production, circulation and survival, the historian's documentary evidence and the archaeologist's contextual knowledge. Aitchison's study (1988) takes this conjunctive approach in looking at Roman coins, concluding that in some cases they were deliberate deposits. Trade routes and patterns of commerce are traced by looking at circulation of coins. For example, the boundaries of a trade territory are delimited by observing how far away from the original place of issue coins are found. Epstein's article (1980) reflects this synthesis in looking at Old World coins found in the United States, reaching a negative conclusion about pre-Columbian contact due to lack of contextual information.

Studies on historic sites are revealing a growing interest in the single coin find, or group of unrelated finds as opposed to coin hoards. Articles seeking economic and political explanations for specie shortages in colonial economies proliferate (Nettels 1931; Martin 1977; West 1978; Redish 1984). Collis (1981) explores factors relevant to pre-Roman coinage contexts, emphasizing the applicability of such a study to colonial site coin finds. Beals (1980) studies the mint sources, trade patterns and contextual

relationships of 19th century Chinese coins from Pacific Northwest aboriginal sites. Asian coins from Yreka, California (Farris 1979) and Tucson, Arizona (Olsen 1983) are used to test the hypothesis that ethnic coins were used as intra-community currency. Heldman (1980) studies French and British coins at Fort Michilimackinac in Michigan, determining that distribution of the coins reflects social status within the settlement pattern of the site.

This paper will hopefully add dimension to these new studies. The non-perishable nature of coins excavated at Monticello in conjunction with the extraordinary amount of documentary resources pertaining to that site provides an optimum opportunity for developing archaeological goals. An historical overview of the 18th and 19th centuries provides background for a distribution study of the assemblage of 43 coins. Methodology involves a numismatic description of the coins followed by a graphical comparison of the following variables: coin type, content, size, value, date, context date, layer depth and site location. Graph results will then be analyzed, and the evidence related to the site in order to draw conclusions.

## CHAPTER TWO

### HISTORICAL OVERVIEW

#### Monetary Conditions: 18th-19th Centuries

The study of any archaeological assemblage of coins requires some knowledge of their cultural and historical context, circumstances which surround them, historical economics of coin production and circulation, international and internal political events, and the economic status of the people who used the coins. The coins comprising the Monticello archaeological assemblage were produced over a 200 year time span, were deposited there while Virginia was first a colonial and later federal territory, and are comprised of both foreign and domestic issues.

"Specie is the most perfect medium because it will preserve its own level; because having intrinsic and universal value, it can never die in our hands..."

(T. Jefferson to J. W. Eppes, Nov.1813)

(Ford 1905, vol.xi)

The history of coinage in America is a study of frustration, scarcity, poor policy and crisis. Data on monetary conditions of the North American colonial currency system are often incomplete. The statistical record is fragmentary; personal letters say little about the volume of means of payment, and even less is known about the velocity of money (speed with which money changed hands during a period of time) (Ernst 1973:8). Yet one fact does emerge: colonists believed that "good" money was "hard" money, i.e. coins. The

colonists' response to economic events and policies throughout the 18th and 19th centuries was a constant reaction to the expansion and contraction of the hard money supply, despite the availability of other forms of "money". The merchants and planters of that time seldom rose above short-term considerations, which in turn directly affected the amounts of coin in the system (Ernst 1973:355).

The American colonies fought a chronic shortage of coin from the 17th through most of the 19th century. As early as 1695, Britain forbade the exportation of coin to the colonies, thereafter failing to provide local coinage for the colonies, and refusing to allow the colonies to mint their own coin (Nussbaum 1957:7). Coin was too badly needed for English expansionist policies, particularly with an inadequate currency supply at home. Tensions were steadily mounting as England insisted on receiving American customs duties and other taxes in the coin so difficult to obtain (Nussbaum 1957:31-33). Nettels (1931:245) theorizes that the British felt that if the colonies possessed a large fund of coin they would develop manufactures of their own and acquire a self-directed trade. Ironically Britain merely facilitated the very result they were seeking to avoid.

The Americans countered with their own solutions, and by the 18th century the colonies were conducting business using barter, book credit, commodity money and foreign specie. Although unable to substantially accumulate coin, the colonies managed to survive by

acquiring and circulating foreign specie through maritime trade and piracy. The main goal of the colonies' trade, apart from England, was the Spanish West Indies. More coins were in circulation there than anywhere else, due to the vast output of Mexican, Bolivian and Peruvian silver mines. Goods left the colonies - dried fish, whale oil, pickled beef, grain, lumber and tobacco - and coin returned in their place (Nussbaum 1957:8). Unfortunately, the colonies bought more than they sold, which meant a constant drain of coin out of the colonies back to Britain (Nettels 1931:220). Slavery helped money circulation, too. At this time, nations in Europe were settling down to their own currencies to the exclusion of each other's; but in the American colonies, there still existed a sort of monetary free-for-all (Porteous 1969:223).

Coin brought to the colonies was not entirely Spanish, but Spanish and Spanish colonial silver became dominant. The Spanish Real, or Peso, came to be known in America as "Piece of Eight". At the same time, a European coin of the same size as the Peso, the Rix-dollar, was being used interchangeably with the Peso. Of the same size, content and weight, both came to be called "dollars" (Nussbaum 1957:10). There were countless other foreign coins in use, as well: silver four, two, one and one-half Reales; Guineas; Chequins; Moidores; Ducatoons; Ecus; Crusados; Louis d'Ors; Sequins; Johannes; and Doubloons (Peden 1954:171). The reales were frequently halved, quartered, or in the case of the Piece of Eight,

cut into eighths, or "bits", to make change.

The colonists were used to reckoning in terms of £ (pounds sterling), s. (shillings) and d. (pence), so it proved necessary to establish legal ratios between the dollar and English units. In 1704, Queen Anne stated the rate at 1 dollar = 4 s., 6 d., but the colonies quickly enacted their own exchange rates as high as 6 s. in some cases (McCuskar 1978:118). Coins flowed out of some colonies in favor of being redeemed in other colonies where exchange rates were higher. Reciprocal relations of the American colonies became those of independent states, compounding monetary problems. Cutting, clipping and counterfeiting of silver coins added to the confusion.

"Money is the nerve of war."

(T. Jefferson to Albert Gallatin, 1815)

(Ford 1905, vol.VI)

Estimates vary as to how much specie was in circulation at the beginning of the Revolutionary War. In silver value, anywhere from \$6 to \$12 million in coin was in the colonies - not much for a population of 2.5 million (Nussbaum 1957:26). The major problem was how to finance the war. While inflation was running rampant and coins were, as usual, scarce, the only solution was bills of credit and paper money. The situation improved with the French alliance in 1778: France paid subsidies in gold and silver and France's ally, Spain, allowed coin to be sent from Cuba (Porteous 1969:225). As more money flowed into the colonies, hoarders released their caches,

so that by the 1780's specie was available again. Despite the subsidies, by the end of the war, Spanish dollars outnumbered other coins in North America by three or four to one (Porteous 1969:225).

"It is difficult to familiarize a new coin to the people; it is more difficult to familiarize them to a new coin with an old name. Happily, the dollar is familiar to them all and is already as much referred to for a measure of value, as their respective provincial pounds".

(T. Jefferson, Notes on the Estab...1784)  
(Ford 1905, vol.IV)

The colonies needed their own coinage. Foreign coins in use at the time varied in weight and intrinsic value. Even more important, plantations lacked a subsidiary currency: their smallest coin was a Spanish Real and they needed the farthings, pence and half-pence Britain refused to supply (Nettels 1931:227). The Articles of Confederation in 1778 granted each state the right to coin its own money, but the Constitution repealed this decision in 1789, showing a movement toward more national unity (Watson 1899:9). The federal mint was established in 1792, and the Coinage Act of that year introduced the decimal system with the old familiar "dollar" as the basic unit. Minting of federal coins began in 1793 (Nussbaum 1957:54).

The newly minted silver dollars were newer and shinier than the Spanish dollars, but also weighed less. It became common practice to export the smaller U.S. dollar to the West Indies and exchange it there for the heavier and more valuable Spanish dollar (Watson 1899:77). Spanish and Mexican dollars (actually worth \$1.016 federal

dollars) were declared by Congress in 1793 to be legal tender and equal in value to the U.S. silver dollar regardless of weight (Sumner 1897:617). Coins in values of \$10, \$5, \$2.50, \$1, 50¢, 25¢, 10¢, 1¢ and ½¢ were struck. The 1¢ and ½¢ were of copper, the other denominations up to \$1 were silver, and those over \$1, gold. The \$5 piece was regarded as equivalent to Britain's pound sterling, the 25¢ to the British shilling, and the ½¢ was counterpart to Britain's farthing. In 1806, minting of U.S. silver dollars ceased and lower denominational silver coins became the focus (Nussbaum 1957:62).

The new system was having some problems catching on. People had reckoned in dollars before 1792, but in Spanish dollars, not U.S. dollars. Reckoning in £, s. and d. continued and foreign coins remained in circulation. Well into the 19th century, accounts were kept sometimes in British terms, sometimes in U.S. terms, and sometimes in both. Thomas Jefferson, in his Notes on the State of Virginia (Jefferson in Peden 1954:173) lists state expenses in both dollars and guineas. The problem was not resolved until foreign specie was declared illegal in 1857, but early glitches in the system had lingering effects into the 20th century.

"One of the great advantages of specie as a medium is, that being of universal value, it will keep itself at a general level, flowing out from where it is too high into parts where it is lower."

(T. Jefferson to J. W. Eppes, Nov.1813)  
(Ford 1905, vol.XI)

During the 19th century, the tendency begun in the 18th century

for coinage to be more prolific but at the same time less important continued. The total amount of coin in circulation was still very small, and mostly foreign coin. The century experienced crisis after crisis in the money supply. The War of 1812 and the continuous export of American silver to the West Indies left only worn smaller foreign pieces in the seaboard cities until well into the 1820s (Martin 1977:1017). During the 1830s, the coinage of silver increased rapidly, but it was undervalued; crop failures and unpaid loans caused one of the longest and severest economic crises in U.S history, and the British withdrew investments and credits in panic. By the 1840s, silver scarcity resulted in importation of large amounts of foreign specie; the U.S. government attempted to discourage use of foreign coin by re-coining them (Martin 1977:1018). Legal tender status of foreign coins was cancelled in the 1850s; copper coinage increased; usage of checks limited the circulation of coin (Nussbaum 1957:94).

During the Civil War, small silver coins disappeared entirely from circulation and heavy inflation resulted (American Journal of Numismatics 1867). Copper and nickel coins predominated until well after the war. In the 1870s, the U.S. Treasury issued silver coins in exchange for paper notes, bringing large amounts of silver coins back into the country (Watson 1899:259). By 1890, the existing silver coins were in poor condition, so Congress resumed large scale re-coining of subsidiary silver pieces (Nussbaum 1957:144). With

the advent of low-priced American mass-produced items like newspapers, cigars and beer, small denomination pieces like 3¢ and 5¢ increased.

In conclusion, the foundation for the condition of coins in the U.S. was grounded in the unshakable belief that only coins were "good" money. When England called in loans and debts to the colonies, the colonists responded with immediate jettisoning of coin in payment. Had there been a better understanding of - and willingness to use - other monetary means, i.e. credit and paper money, the constant gold and silver drain might have been averted. By the time Americans became aware that they controlled their own money supply in the 19th century, another problem set-in: regulation. Prior to regulation, coins were accepted at differing rates in different states. Regulating the value of money meant adjusting coins - all coins - to a fixed standard. This battle for a balanced system continues today.

#### Virginia: 18th-19th Centuries

Virginia boasted many "firsts". It was the first continental colony founded. It had one of the first federal census, taken in 1790 (Salmon 1983:64), recording 61 counties, 95 parishes, 1 city, 25 towns and 500,000 inhabitants (Tyler 1967:276). It was also first to experience problems with money and first to try to lessen these problems by increasing the value of its money. Although it

was to be the first (and only) colony for which Britain would mint currency, arrival of the coinage came "too little, too late".

Virginia's economy early on became rooted in the tobacco culture. For this reason, Virginia must be studied in a different light than other major colonial port regions. Tobacco was the "boom" product by the mid-18th century, but it had not been an easy achievement. The problem of transporting tobacco around the falls of rivers made Piedmont Virginia a somewhat undesirable place to settle early in the century. With improvement in transportation methods and shrinking economic opportunity in the tidewater areas, thousands of migrants settled a vast area of the Piedmont between 1740 and 1775, turning thousands of acres of land into tobacco plantations. Three-quarters or more of land in Piedmont Virginia was patented by 1770 (Kulikoff 1986:141).

By the second half of the 18th century, recurring depressions, economic stagnation and a slump in the tobacco industry cut-off the inflow of money, and one family in four in the Piedmont no longer relied upon tobacco as its primary staple (Kulikoff 1986:116). Disturbances in the West Indian markets further reduced the supply of coin that Virginia obtained in exchange for shipments of farm and forest products. Virginia's supply of coin nearly vanished; what little coin remained in the colony either commanded a premium or was debased and counterfeited (Ernst 1973:20).

This is not to say that Virginia had no coins. It is the

nature of trade, that while there might be a chronic drain of specie, there is also a chronic inflow of coin. Guineas, crowns, shillings, johannes, half-joes, pistoles, dollars and pistareens were only some of the types in use. But the outflow of coin exceeded the inflow on a steady basis in heavy taxes and loan payments to Britain.

Virginia's efforts to obtain its own coinage were rendered ineffective due to delays in communication, political changes, protocol, misunderstandings and economic trends (Newman 1956:2). In 1645, Virginia passed an act to permit the coinage of copper, but none were issued. In 1710 and again in 1727, the colony requested copper coinage from Britain; the requests were ignored (Newman 1956:5). The colony gave up asking for its own coin and in 1769 attempted to purchase £2,500 sterling worth of English copper coins (Hening 1769:342); the deal did not go through until 1771, and only for £1,000 worth. Floods on the James, York and Rappahannock rivers in 1771 wiped out thousands of hogsheads of tobacco, much tobacco land and a number of public warehouses (Bland to Adams letter, 1771). Britain retrenched in 1772 following a financial crisis and tightened specie exportation; Virginia traders and planters sold-off their tobacco as quickly as possible and paid-off British creditors in specie (Ernst 1973:330).

Finally, in 1773 Britain agreed to mint coins specifically for Virginia's use (Hening vol.VIII, 1821:535). There were delays at

the mint. In 1774, a partial shipment (672,000) of the new Virginia halfpence arrived in New York harbor, but distribution was delayed pending instructions from the Crown (Newman 1956:23). The coins arrived in Williamsburg in 1775, and were immediately bought up in large quantities and taken out of circulation by hoarders fearing war (Noel Hume 1969:168). Fifty days later the Revolution began.

The Virginia halfpence are, uniquely, the only fully authorized coins with legal tender status minted specifically for any of the English colonies. Although the value of foreign gold and silver coin was regulated by law, no copper coin of any kind circulated in Virginia prior to distribution of the 1773 halfpence (Newman 1956:4). Some sources indicate that even after the war, the Virginia halfpence did not circulate. In 1789, there was a copper panic and the value of all copper coin circulating in the U.S. collapsed to its intrinsic value as metal. Tons of coppers were melted down, probably including many of the halfpence. Ironically, the Virginia halfpence had the unique distinction of being considered at first too valuable to circulate freely before the war and subsequently of being of too little value after (Newman 1956:36). Yet during the 1950's restoration of Williamsburg, forty Virginia halfpence were unearthed. Newman (1956:34) feels that since twice as many halfpence as other types were found, and since these halfpence show wear, the Virginia halfpenny was the predominantly used coin in Williamsburg.

The Revolutionary War disrupted the tobacco markets irrevocably, and by the end of the 18th century planters turned to grain farming and herding to survive. Though the tobacco trade picked up again somewhat in the 1780s, not all planters returned to tobacco cultivation (Kulikoff 1986:157). In 1813, Thomas Jefferson in a letter to J. W. Eppes said "...no man knows what his property is now worth, because it is bloating while he is calculating; and still less what it will be worth when the medium shall be relieved from its present dropsical state" (Ford 1905, vol.XI). Conditions were if anything worse seven years later when Jefferson wrote to H. Nelson, "This state is in a condition of unparalleled distress. The sudden reduction of the circulating medium...is producing an entire revolution of fortune. Our produce is now selling at market for one-third of its price before this commercial catastrophe..." (Ford 1905, vol.XII). Throughout the 19th century, inflation and coin scarcity had become the rule.

## CHAPTER THREE

### Monticello: History and Archaeology

#### Historical Background

If information about the money situation in 18th and 19th century America is scarce and fragmentary, documentation pertaining to Monticello is plentiful and detailed. In addition to Jefferson's writings there are diary entries, personal letters, memoranda, accounts in travel books, magazine and newspaper articles, and many detailed biographies written since his death. Using these sources and more, Monticello's two centuries as a working plantation and later, public shrine, come to light.

Thomas Jefferson inherited 1,000 acres at the age of 14, and it was on this land that he began building Monticello in 1768. The main house sits on the top of an 860 foot high mountain which was leveled in order to place the structure. To the east are the Piedmont farmlands; to the west, the city of Charlottesville and the Blue Ridge Mountains; 1.5 miles below the mountaintop flows the Rivanna River. Jefferson's choice for a setting must have been a mixed blessing: the view in all directions is extraordinary, but access would have been difficult at best in pre-automated days. In 1772, Jefferson brought his bride Martha to live in the South Pavilion while the main house was under construction, moving into the latter in 1775 (Kelso 1985:106).

Jefferson carried on two building phases at Monticello (Betts 1987:338). The first, begun in 1768 and continuing until the beginning of the Revolutionary War, saw the construction of the south pavilion, the mansion house and some of the structures on Mulberry Row, the plantation street or industrial area. During the second period, from 1793 until 1809, the offices flanking the house, the north pavilion and several shops and slave quarters were built. Other structures - overseers' houses, slave quarters, stables and barns - were built as needed in both periods. Monticello seemed always to be under construction of some kind; Jefferson was forever making alterations to his beloved home.

Jefferson inherited slaves from both his father and father-in-law, later acquiring others as he increased his land holdings. All were apparently well provided for. The field hands lived in log structures scattered over Jefferson's farms; the artisan families were housed on the top of the mountain along Mulberry Row (Peterson 1989:535). Jefferson originally had two floor plans for those living along Mulberry Row: 2-room and 5-room cottages with glass windows and half-lights over the doors, the larger cottages with central halls with fireplaces. Why he changed his mind is unknown; these structures were never built. Instead, the 1796 insurance plat reveals slave dwellings of wood, with wooden chimnies and earth floors - typical of slave quarters throughout the south (McLaughlin 1988:144). This same plat reveals a 1000-foot long street with

nineteen closely placed buildings. These buildings remained as described in 1796 until 1802 when certain functions were removed to the newly completed south wing offices. The smith's shop was relocated to the east front of the mansion house. Exactly when the various structures along Mulberry Row ceased to be used, or even to stand, is not known. It is doubtful that subsequent owners carried out much construction or repair work, although some maintenance work was done after 1879 by Monroe Levy (Bear 1978: chp.VI).

Monticello was the household-handicraft-mill complex of an advanced agricultural society. Jefferson believed in the concept of a balanced economy of agriculture, commerce and manufactures. Yet, true industrialism had no place in his thought. What he wanted was "the clatter of spindles and the smoke of shops...(redeemed) by the virtues of nature" (Peterson 1989:940-941). He hoped, literally, to place the manufacturer side-by-side with the husbandman and in this way to preserve the values of an agricultural society within an emerging manufacturing one.

One can imagine life at Monticello during its peak as a working plantation. Mixed in among the industries - carpenters' shop, joinery, nailery, smokehouse/dairy - were the single room slave structures, spartanly equipped with a few pots for cooking, a table, benches or chairs, a bed (McLaughlin 1988:144). Free from work on Sundays and Christmas Day, slaves were allowed to have their own small gardens to tend from which seeds and produce could be sold.

Slaves were occasionally allowed to slaughter stock for meat and trade the surplus to fellow slaves. There was also spinning, weaving and mending to provide clothes for the laborers (Malone 1981:209).

By 1807, Jefferson owned 10,000 acres of land, 200 slaves and the total estate value was \$200,000 (Peterson 1989:924). But declining land values, increased living expenses on top of old debts dating back to the Revolution eventually consumed Jefferson and left him over \$100,000 in debt upon his death in 1826. His daughter, Martha Jefferson Randolph, managed to hold on to the property until her own husband's death in 1828, at which time Monticello was advertised for sale at \$71,000 with 409 acres. The price was quickly reduced, however, and in 1831 the property sold to James T. Barclay for \$7,000 (Lord 1928:83).

Little is known of the Barclay period at Monticello, except that Barclay destroyed Jefferson's lawns and most of his poplars in order to plant mulberry trees to raise silkworms. The trees did not thrive, and it was not long before Barclay was seized by missionary zeal and put the property up for sale. By 1838 the property had been sold again.

Monticello was saved from ruin by Uriah P. Levy of New York city, then a young naval lieutenant, who acquired the property from Barclay for \$2,500 with 218 acres of land (Rezneck 1980:93). Levy was 44 years old when he purchased Monticello. Born in 1792 in

Philadelphia, Levy was a descendant of shopkeepers who had immigrated from Germany before the Revolution. He became a sailing master in the merchant marine, then joined the Navy to serve in the War of 1812 attaining the rank of commodore by the time of his death (Cable and Prager 1978). Monticello was Levy's summer home and more often than not, he was not in residence. But his interest in the property was not transient: he added an additional 2,000 acres to his original purchase before his death in 1862.

Sometime during the period of 1862-64, the Confederate Government seized the plantation, auctioned-off most of its contents and sold the property to Lt. Col. Benjamin F. Ficklin in 1864 for 80,000 confederate dollars (Peterson 1989:5). The property reverted to the United States the following year with the end of the war, and was placed back in the hands of the Levy family.

In his will, Uriah Levy had left Monticello to the U.S. Congress as a school to educate children of deceased Navy officers as farmers, but the will was so badly drawn that Congress turned down the gift. The estate was tied up in litigation for years among the many Levy heirs. Jefferson Monroe Levy, Uriah's nephew and an aspiring New York attorney and later congressman, eventually acquired full ownership by buying out all other heirs, and moved to the mountain in 1878 (Postal and Koppman 1979:303). The many years of neglect had left Monticello derelict, and it is believed that by this time most if not all the outbuildings had either fallen down or

been torn down (Lord 1928:87). After 1890, Levy spent huge sums of money on restoration of the mansion but no major changes were made to the property overall. The gardens and orchards deteriorated. Finally, close to the end of his life, Levy sold Monticello with 700 acres to the Thomas Jefferson Memorial Foundation for \$500,000 on December 23, 1923 (Rezneck 1980:96).

Work began in the 1950s to restore the house to its original state, and today the mansion stands much as it did in the last seventeen years of Jefferson's residence. The modern Monticello is, as Brodie puts it, "ascetic, cerebral, cool and elegant" (1974:470). As with many public trusts, the initial thrust was to restore the property for the nearly half-million yearly visitors to Monticello, and work on the grounds began in 1976. In 1979, archaeological work also began, initially to uncover several landscape features which would, in time, be restored. But the picture was not complete. Buried and half-forgotten were the whispers of Monticello's other residents - black and white - without whose labor and skills Monticello would never have been built nor survived. So archaeology began a decades-long mission to peel away 200 years of dirt, and to piece together the "behind the scenes" history of one of America's greatest treasures.

#### Archaeology at Monticello

The beginning of a structured archaeological program began at Monticello in 1979 under the directorship of Dr. William Kelso. Due

to the fact that Jefferson recorded details of architecture, landscape and everyday life, it is said that Monticello is one of the most documented domestic archaeological sites in the western world (Kelso 1982-1983:62). Some of the 50,000 documents surviving in Jefferson's hand have helped guide archaeology over the approximately 25 acres on the mountaintop. Jefferson's Garden and Farm Books, a 1796 insurance plat of buildings and an 1809 survey of the mountaintop were key sources (Kelso 1985:110).

According to the 1796 plat, buildings built and standing along the 1000-foot section of the approach road known as Mulberry Row at that time included a stable, stone outhouse, coal sheds, a saw pit, plank storage house, iron storage house, smokehouse and dairy, and a washhouse. The maps and plats do not indicate how long the Mulberry Row complex of buildings survived, but at least the joinery, washhouse, stone house and stable were standing at the time of the 1809 property survey. It is surmised that when Monticello was no longer a working plantation under Levy ownership, the buildings along Mulberry Row fell into disuse and disappeared (Kelso 1986).

#### Archaeological Objectives

The thrust of the Monticello archaeological program was to test archaeological techniques such as artifact frequency and distribution, with an unusual degree of potential verification from documents. A related goal was to determine how completely documents can record material culture.

The initial thrust of archaeology was three-fold. The first goal was not to focus on the mansion, but rather to record the form and function of outlying structures, craft and industrial buildings and slave quarters. Unlike many plantations, Monticello provided the rare opportunity to examine relatively undisturbed outbuilding remains with documents available to define what the building had been used for at specific points in time.

The second goal was to determine how Afro-American slaves lived and worked in the buildings. The 1796 insurance plat and the 1809 survey, used in conjunction with surviving lists of Monticello slaves and documents recording what materials they were issued, promised a prime opportunity to study a usually undocumented sector of American society.

The third goal was to relate Mulberry Row to both the nearby gardens below it and the mansion above.

The research design for Monticello archaeology has remained essentially the same over time, merely being refined as discoveries warranted. By the mid-1980's, the emphasis shifted from contrasting the life of the Jefferson family in the mansion and life for house servants and craftsmen to an interest in looking at others in the labor force as a means of fairly measuring the standard of living of Mulberry Row's slaves. The architectural design and related stratified artifacts from the several slave quarter sites already excavated along Mulberry Row in light of the historical records left

little doubt that the Monticello slave community was an extremely complex hierarchy of house servants, artisans and laborers. The dwelling sites of free white laborers living some distance from the mansion needed to be investigated. In 1989, excavation began of the house of William Stewart, a skilled white blacksmith Jefferson hired in 1801. Excavations are on-going with results pending; however, the research potential for such a site is enormous given that it is unique to be able to clearly identify the house site of a free white plantation laborer.

Future plans include recovering and analyzing artifacts from relatively remote cabin sites, located far enough from the mansion to enhance the possibility that objects which might be found there were used solely by the slaves.

#### Plan of Work

Archaeologists were hired in 1957 to explore the western end of Mulberry Row and a buried stone wall below the garden. The digging was incomplete and the results of limited value. Excavations began in 1979 with the testing of a fence line. Excavations proceeded according to the grid established in 1979 which employs a series of 100' squares oriented to the axis of the mansion. Excavation units were 10' squares within the overall 100' system with natural stratigraphy being the basis of vertical control. Each sub-unit was assigned an excavation register number.

Various archaeological techniques were employed in discovering

and interpreting sites. Archaeological methods varied in success. Infra-red study was of little help. Soil resistivity testing was only of slightly more use. Transect trenching was quite successful in locating buildings. Photogrammetry produced somewhat distorted though still useful pictures. Archeomagnetism established building dates with too broad plus/minus dates for inferences to be made. Seriation of ceramic vessels proved useful only for deposits built up over relatively long periods of time. Successful artifact patterning was done using a computer mapping program called SYMAPS which plots the distribution of varying quantities of artifacts recovered on an archaeological site. Faunal analysis produced excellent results in determining what people ate over a period of time at various specific building sites (Kelso 1982-1983:63-81).

### Results

The results of Monticello archaeology since 1979 have revealed much of the nature and extent of Jefferson's Monticello landscape, architecture, clues to house furnishings and considerable material remains of the commercial, manufacturing and domestic lives of Monticello's servants and artisans. Quantitative analysis of artifacts provided a means of determining social rank and wealth, of determining design and function of buildings and of establishing dates for site occupation.

## CHAPTER FOUR

### Coins - Numismatic Analysis

Numismatics, defined as the study of coins, provides prerequisite background information for an archaeological coin analysis. A numismatic description of coins involves identifying each coin in a group or assemblage as to denomination, mint date, mint mark, metal content and particular characteristics, and then assigns a grade based on overall condition of coin. Correctly identifying coins in this way requires a trained eye. David Consolvo, coin collector and supplier to eight museum shops in the southeast, aided in a numismatic evaluation of the 43 coins in Monticello's assemblage.

#### Coin Making

Numismatics is one of the oldest hobbies in the world; people have been collecting coins for at least 2,000 years. Before the 20th century, collectors graded their coins as either "new" or "used", but with the numismatic boom in the 1950s came new, more sophisticated grading practices (Ruddy 1988:20). Understanding the intricate coin condition grading system is predicated on some knowledge of how coins were - and are - made.

In colonial America, coin presses were operated by human muscle. The process of rolling metal into strips from which

planchets (circular disks of metal) could be cut was achieved by horsepower (Ruddy 1988:140). Difficulties during these early years were chronic and often acute shortages of copper, inadequate power, non-standardization of metal content of many pieces due to copper sources such as reclaimed hoops from wooden barrels, melted-down cannon from the Revolutionary War, copper sheathing from roofs and ship bottoms.

For the first several decades of the federal mint's operation beginning in 1792, silver coins had intrinsic value equal to their face value. So, if a planchet was found to be under or overweight, it was rejected and went to the melting pot. If planchets were only slightly overweight, a metal file was drawn across the surface, removing excess metal and leaving a series of grooves called "adjustment marks". This was a common practice and continued well into the latter part of the 19th century. The planchet was then edge-lettered and struck, or stamped by the the die.

In 1836, steam-operated presses were installed at the Philadelphia Mint and coinage became more uniform. In 1838, branch mints were established in North Carolina and Georgia (both closed in 1861), and later in San Francisco (1854), Carson City (1870) and Denver (1906) (Ruddy 1988:144).

#### Coin Grading Scale and Terminologies

There are four factors affecting the condition of the coin

assemblage at Monticello. Certain characteristics of a coin are the result of the minting process itself, for example at the Philadelphia Mint the very mechanics of mass production caused coins to be battered somewhat. Circulation wears a coin further. A third factor, corrosion from long-term contact with soil, produced the greatest effect on the coins, and made clearcut conclusions about circulation wear difficult and sometimes impossible. Finally, the process of cleaning and conservation of some of the coins removed a thin veneer of metal and abraded the surfaces to a degree. The designs on most coins, however, were visible enough to make a reasonable estimate of condition.

The following grading scale, known as "adjectival grading", is generally used by collectors and dealers, and is used for purposes of this study. Some of the grades have several sub-levels, but such complexity, though useful for collectors' purposes, was deemed unnecessary here.

**Poor:** coin worn so smooth it is barely identifiable as to type. Most of the lettering and numerals are worn away.

**Fair:** coin is well-worn but identifiable as to type. Not necessarily identifiable, though, by date or mint mark.

**About Good:** well-worn coin which can still be identified as to date and mint.

**Good:** overall clean-appearing coin with all major lettering visible and with basic features outlined, except for certain coins in the 1790s and early 1800s which may have certain portions of the inscriptions missing, but with date numerals distinct. On Indian cents and Liberty Seated coins, the word

"Liberty" will not be visible.

Very Good: one of the easiest grades to determine. The word "Liberty" on the headband or shield will be mostly visible (at least three to four letters of the word) plus all other features of both obverse and reverse.

Fine: all major design features are visible. The word "Liberty" is complete.

Very Fine: more intricate designs and details will be visible.

Extremely Fine: all details will be clearly visible, and often there will be traces of mint lustre.

About Uncirculated: a coin which has seen a slight amount of circulation but which usually possesses much original mint lustre.

Uncirculated (or, Mint State): coin has never been in circulation. However, due to the minting process and handling at various banks, coin can show nicks, marks, scuffs and abrasions.

Proof: no wear, friction or rubbing marks of any kind. Mirror-like surfaces.

Numismatists use a particular vocabulary in discussing coins.

The most frequently used and basic terminologies follow.

Cut: among Spanish coins, the practice of cutting coin into eights, quarters or halves to make change.

Die: a hardened metal punch, the face of which carries an intaglio (incuse mirror-image) to be impressed on one side of the planchet.

Edge: often called the "third side" of a coin, and often bearing crenelated marks. Lies perpendicular to the obv. and rev.

Field: the flat part of a coin's surface behind and between the head and legend, or inscription.

Legend: the inscription around the type.

Milled: the crenelation of the edges of some coins by machine.

Obverse (obv.): the front face of a coin, generally a portrait.

Reverse (rev.): the back of a coin.

Rim: raised border around the circumference of a coin. Not to be confused with the coin's edge.

Type: the central design.

### Coins At Monticello

Based on the above grading scale and official terminology for describing coins, the 43 coins in Monticello's archaeological assemblage were assigned a conditional grade. Any distinguishing characteristics are included in the description. For site location at Monticello, see Fig. 10.

In the colonial coinage category, "Spanish colonial" as opposed to "Spanish" indicates that the country of origin of a coin was either Mexico, or Spanish holdings in South America or the Caribbean. In some cases, when no date is visible but the coin is identifiable by design, the range of minting dates for that particular coin type is given. With the exception of some of the foreign colonial coins, Monticello's coins are known to have been minted in Philadelphia, although some of the coins are so corroded that mint marks are indecipherable.

Monticello's coins span a wide range of grades, from Poor to Extremely Fine, with the largest number of coins classified as Very Good. Three coins are missing from the collection and were therefore unavailable for grading: two Indian Head cents struck in 1870 and 1882 found in the Kitchen Yard west and Building S, and a

U.S. Quarter dollar, dated 1877 and found in the Kitchen Yard east.

### Colonial Coinage

1716-1729 cut quarter of a Spanish Two real. Possible origin: Segovia, since the mint of that city favored a shield with a slight point. Obv. (if whole): arms with legend "HISPANIARUM REX", with date although no date is visible on this piece. Rev. (if whole): crowned shield with legend "CAROLUS V \* D(EI) G(RATIA). Reverse is artificially abraded. Very Good obverse. Content: silver. Location: Privy area. (Figures 1a and 1b).

1733 cut quarter of a Spanish Two real. Mint: crowned M mint mark of Madrid. Obv. (if whole): arms of Castile and Leon. Rev. (if whole): crowned shield. Very Good. Content: silver. Location: Building S.

Pre-1746 cut quarter of Spanish Two real. No mint mark visible. Obv. (if whole): probably arms of Castile and Leon, but not visible on this piece. Rev. (if whole): crowned shield with legend "(HISPANIA)RUM RE(X)". About Good, with reverse corrosion. Content: silver. Location: Dry Well.

1764 cut eighth of Spanish colonial "Piece of Eight", or one "bit". Origin: Mexico. Obv. (if whole): crowned coat of arms. Rev. (if whole): crowned globes flanked by pillars of Hercules (identifying symbol of Spanish colonial possession). Very Good. Content: silver. Location: Dry Well. (Figures 2a and 2b).

1772? cut quarter of Spanish colonial One-half real. Origin: Mexico. Obv. (if whole): bust of Charles III with legend "CAROLUS III DEI GRATIA". Rev. (if whole): crowned arms with pillars of Hercules with legend "RFM". Fine. Content: silver. Location: Building R.

1773 Virginia Half-penny with milled edge. Origin: Britain. Obv.: bust of George III with legend "GEORGIUS III". Rev.: crowned shield with legend "VIRGINIA" with date. At least Very Good before corrosion. Content: silver. Location: between Buildings S and T.

1773 Virginia Half-penny with milled edge. Origin: Britain. Obv.: bust of George III with legend "GEORGIUS III". Rev.: crowned shield with legend "VIRGINIA" with date. Very Fine and cleaned. Content: silver. Location: Kitchen Yard west. (Figures 3a and 3b).

1777 whole Spanish colonial One-half real. Origin: Mexico, with crowned M mint mark on reverse. No design visible. Fair. Content: silver. Location: Smokehouse/Dairy (Building M).

1781 whole Spanish colonial One real with hole near rim. Origin: Mexico with crowned M mint mark. Obv.: bust of Charles III with legend "CAROLUS III DEI GRATIA". Rev.: crowned arms with pillars of Hercules with legend "HISPAN\*ET\*IND\*REX RFM". Good to Very Good. Content: silver. Location: Smokehouse/Dairy (Building M). (Figures 4a and 4b).

1783 Irish Half-penny, bent. Origin: Ireland. Obv.: bust of George III with legend "GEORGIUS III". Rev.: crowned harp with legend "HIBERNIA". Very Good. Content: silver. Location: between Buildings N and O. Two notes regarding this coin: bent side of coin appears to conform in size and shape to lead shot and may have been caused by using coin for target practice. Also, in conversation with R.G. Doty, Curator of Numismatics at The Smithsonian, many Irish coins in use in the American colonies were counterfeit, making this coin possibly suspect as to authenticity. (Figures 5a and 5b).

1772-1789 whole Spanish colonial? Half-real, darkened. Origin: Mexico?. No design visible. Fair. Content: silver. Location: Building S.

No visible date cut quarter of a Spanish Two real. Origin: Spain. Design unidentifiable from available piece. Very Good. Content: silver. Location: Storehouse (Building L).

No visible date cut quarter of a Spanish Two real with hole near rim. Origin: Spain. Obv. (if whole): arms of Castile and Leon with legend "HISPANIARUM REX". Rev. (if whole): crowned shield. Good. Content: silver. Location: Building R. (Figure 6).

### Federal Coinage

#### Large Cents

Cents were the first coins struck under the authority of the United States Government. Large cents were coined every year from 1793 to 1857, with the exception of 1815 due to a copper shortage. Many of the earlier pieces were struck later than the dates shown on the coins (Yeoman 1978:66).

1793-1857 Large cent. Probably earlier rather than later since obverse has hairbow. Origin: Philadelphia Mint. Obv.: bust of Liberty with legend "LIBERTY", although obv. corroded away. Rev.: wreath with legend "UNITED STATES OF AMERICA". Very Good to Fine

with corrosion. Content: copper. Location: Kitchen Yard west.

1796 Liberty Cap Large cent. Origin: Philadelphia Mint. Obv.: bust of Liberty with legend "LIBERTY". Rev.: wreath with legend "UNITED STATES OF AMERICA". Very Good plus, but very corroded; old cleaning. Content: copper. Location: Building R.

1806 Draped bust Large cent. Origin: Philadelphia Mint. Obv.: bust of Liberty with drapery and legend "LIBERTY". Rev.: wreath with legend "UNITED STATES OF AMERICA". Good with a fine porosity and cleaned. Content: copper. Location: between Buildings C and D.

1808-1814 Classic head Large cent. Origin: Philadelphia Mint. Obv.: bust of Liberty with stars around rim. Rev.: wreath with legend "UNITED STATES OF AMERICA". Very Good plus, with corrosion and porosity. Content: copper. Location: Smokehouse/Dairy (Building M).

1816 Coronet Large cent. Origin: Philadelphia Mint. Obv.: bust of Liberty with coronet and stars around rim. Rev.: wreath with legend "UNITED STATES OF AMERICA". Very Fine but very corroded and cleaned. Content: copper. Location: between Buildings R and S.

1817 Coronet Large cent. Origin: Philadelphia Mint. Obv.: bust of Liberty with coronet and stars around rim. Rev.: wreath with legend "UNITED STATES OF AMERICA". Very Good but very porous and cleaned. Content: copper. Location: Smokehouse/Dairy (Building M).

1817 Coronet Large cent. Origin: Philadelphia Mint. Obv.: bust of Liberty with coronet and stars around rim. Rev.: wreath with legend "UNITED STATES OF AMERICA". Fine, but corroded and cleaned. Content: copper. Location: between Buildings R and S.

1818 Coronet Large cent. Origin: Philadelphia Mint. Obv.: bust of Liberty with coronet and stars around rim. Rev.: wreath with legend "UNITED STATES OF AMERICA". Very Good, cleaned. Content: copper. Location: Smokehouse/Dairy (Building M). (Figure 7).

No date visible (1806?) Large cent. Origin: unknown as design is unidentifiable. Poor. Content: copper. Location: Building R. There is some reason to believe this coin is not U.S. issue and may possibly be Irish and even counterfeit. Until confirmation, however, for purposes of this study this coin is classified as federal.

### Half Cents

The half-cent is the smallest value coin in terms of face value struck by the United States, and was coined from 1793 to 1857. All half-cents are scarce from a collector's standpoint, probably due to various intermissions in coinage throughout the 1830s and 1840s (Yeoman 1978:61).

1809 Classic Head Half-cent. Origin: Philadelphia Mint. Obv.: bust of Liberty with word "Liberty" on headband and stars around rim. Rev.: wreath with legend "UNITED STATES OF AMERICA". Reverse design is rotated 150 degrees. Very Good, cleaned and porous. Content: copper. Location: Smokehouse/Dairy (Building M).

1809 Classic Head Half-cent. Origin: Philadelphia Mint. Obv.: bust of Liberty with word "Liberty" on headband and stars around rim. Rev.: wreath with legend "UNITED STATES OF AMERICA". Fine, but corroded. Content: copper. Location: Building S. (Figure 8).

### Half Dimes

Half dimes were coined from 1794 to 1873, with many varieties in the early dates. All were struck at the Philadelphia Mint and had milled edges.

1797 Draped Bust Half dime. Origin: Philadelphia Mint. Obv.: bust of Liberty with stars and word "LIBERTY" in legend around rim. Rev.: eagle inside wreath with legend "UNITED STATES OF AMERICA". Nice Very Good. Content: silver. Location: Kitchen Yard west. Note: this coin is the best of the collection for two historical reasons. Only 44,527 half dimes were struck in 1797, considered a very small number. Also, on June 30, 1797, Jefferson ordered \$300 in dimes and half-dimes to be minted in Philadelphia for use at Monticello, of which this coin may be part (Jefferson in Bear and Stanton: at press). (Figures 9a and 9b).

1858 Liberty Seated Half dime. Origin: Philadelphia Mint. Obv.: Liberty seated holding flag with stars around rim. Rev.: wreath with legend "UNITED STATES OF AMERICA". Very Fine. Content: silver/copper. Location: Kitchen Yard east.

### Other Denominations

1863 Indian Head cent. Origin: Philadelphia Mint. Obv.: bust of Indian girl with legend "UNITED STATES OF AMERICA". Rev.: oak wreath with small shield at top and no legend. Very Good and corroded. Content: copper. Location: Kitchen Yard west.

1866-1867 Nickel Five cent. Origin: Philadelphia Mint. Obv.: shield with olive leaves and legend "IN GOD WE TRUST". Rev.: circle of stars with rays between each star, numeral "5" in center and legend "UNITED STATES OF AMERICA". At least Very Good before corrosion. Content: nickel and copper. Location: Kitchen Yard west.

1867 Nickel Five cent. Origin: Philadelphia Mint. Obv.: shield with olive leaves and legend "IN GOD WE TRUST". Rev.: circle of stars around numeral "5"(without rays) with legend "UNITED STATES OF AMERICA". Very Good. Content: nickel and copper. Location: Kitchen Yard east.

1867 U.S. Three cent. Origin: Philadelphia Mint. Obv.: bust of Liberty with coronet and legend "UNITED STATES OF AMERICA". Rev.: olive leaf wreath with roman numeral "III" in center. Probably Fine before corrosion and harsh cleaning. Content: nickel and copper. Location: Kitchen Yard east.

1868 U.S. Two cent. Origin: Philadelphia Mint. Obv.: shield with olive leaves and banner with legend "IN GOD WE TRUST". Rev.: oak wreath with legend "UNITED STATES OF AMERICA". Fine before porosity. Content: copper. Location: Building S.

1870 Indian Head cent. Origin: Philadelphia Mint. Obv.: bust of Indian with headdress and legend "UNITED STATES OF AMERICA". Rev.: oak wreath with small shield. At least Fine, but corroded. Content: copper and nickel. Location: Kitchen Yard west.

1875 Indian Head cent. Origin: Philadelphia Mint. Obv.: bust of Indian with headdress and legend "UNITED STATES OF AMERICA". Rev.: oak wreath with small shield. At least Very Good, but very corroded. Content: copper and nickel. Location: Vineyard.

1884 Indian Head cent. Origin: Philadelphia Mint. Obv.: bust of Indian with headdress and legend "UNITED STATES OF AMERICA". Rev.: oak wreath with small shield. Extremely Fine. Content: copper and nickel. Location: Kitchen Yard east.

1888 Indian Head cent. Origin: Philadelphia Mint. Obv.: bust of Indian with headdress and legend "UNITED STATES OF AMERICA". Rev.: oak wreath with small shield. Fine. Content: copper and nickel. Location: North Yard.

1891 Nickel Five cent. Origin: Probably Philadelphia Mint. Obv.: bust of Liberty with stars around rim. Rev.: wreath with legend "UNITED STATES OF AMERICA \* E PLURIBUS UNUM". Fine, but lightly porous. Content: copper and nickel. Location: Kitchen Yard east.

1914 Lincoln cent. Origin: Probably Philadelphia Mint. Obv.: bust of Lincoln with legend "IN GOD WE TRUST \* LIBERTY". Rev.: wheat ears with legend "UNITED STATES OF AMERICA \* E PLURIBUS UNUM". Fine and porous. Content: copper. Location: Kitchen Yard west.

1916 Indian Head Nickel. Origin: Probably Philadelphia Mint. Obv.: bust of Indian with legend "LIBERTY". Rev.: buffalo with legend "UNITED STATES OF AMERICA". Almost Very Fine. Content: copper and nickel. Location: Kitchen Yard east.

1916 - 1930 U.S. Quarter dollar. Origin: Probably Philadelphia Mint. Obv.: standing Liberty holding shield and olive branch of peace with legend "LIBERTY \* IN GOD WE TRUST". Rev.: eagle surrounded by stars with legend "UNITED STATES OF AMERICA". Nice About Good. Content: silver and copper. Location: Building T.

1920 Mercury dime. Origin: Probably Philadelphia Mint. Obv.: bust of Liberty with winged cap and legend "LIBERTY". Rev.: bundled sticks with legend "UNITED STATES OF AMERICA". Initials "AW", for A.A. Weinman, designer, at back of Liberty's neck. Very Good. Content: silver and copper. Location: North Yard.

#### Circulation - What We Are Able To Conclude About Wear Patterns

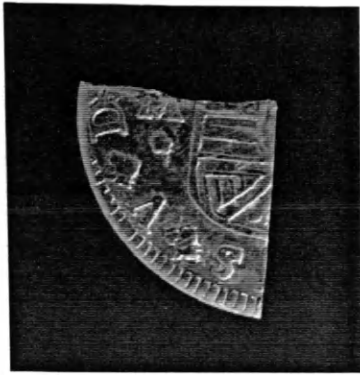
Meshing numismatic information about coin wear with archaeological rules regarding minimum deposition date for a coin would be useful for establishing tighter Terminus Post Quem (TPQ) dates for layers containing coins. In other words, an equation for assigning a set number of years that coins circulated in each

category of the adjectival grading scale would have enormous implications for archaeological interpretation. It might be possible to say, for example, that coins in Very Good condition circulated for at least ten years, therefore a coin minted in 1806 with a context date of post 1806 actually shows wear marks indicating much longer usage, implying a later context date. Unfortunately, as such information is not relevant to the world of coin collectors, no such frame of reference is known to exist.

Nor have archaeologists attempted the same, possibly for two reasons. First, coins in the colonial and early federal periods circulated for long periods of time, versus the later federal period when coins began to be taken out of circulation and re-struck at more regular intervals. There is thus no way to compare a colonial coin which was in use for 100 years with a later federal coin, since the latter were used for no more than an average of 20 or 30 years before removal from the monetary system. Second, coins in use in different locales had widely varying degrees of usage over time. Coins in a commercial market setting, say a tavern or town site, would have experienced far more extensive and regular usage in a given period of time than coins on a plantation or rural site. And unlike other artifact types, such as ceramics, a coin did not necessarily or even usually stay at one particular location for its useful life. In short, a circulation lifetime equation may not be possible, and even if it were, results might be too arbitrary to be

of any real use.

Simple mathematical averages based on only archaeological information pertaining to each coin is possible to calculate the average number of years between mint date and minimum deposition date. Of the 43 coins at Monticello, 33 came from undisturbed layers (10 coins either had no visible mint date, or were from disturbed layers). Adding the difference between the mint date and the context date for each of the 33 coins and dividing by 33 gives a total overall average of 14.5 years between manufacture and deposit for the total assemblage. The same done for coins minted before or during the Jefferson period of occupation and deposited during Jefferson's lifetime yields an average of 14.4 years to deposit. Coins minted in the Jefferson period but deposited in the Levy period yields 39 years to deposit. Coins minted in the Levy period and deposited in the Levy period took 8.3 years to deposit. Should a circulation lifetime equation ever be possible, it would be interesting to see how these averages hold-up on a coin-by-coin basis.



a. Obv.

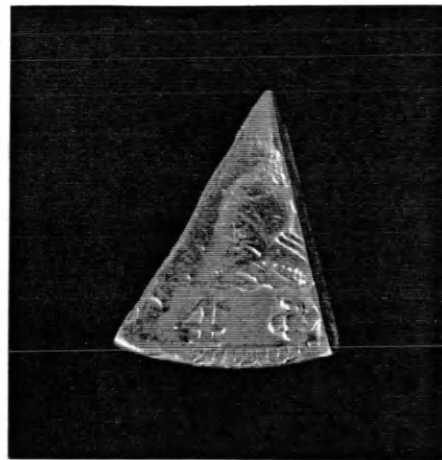


b. Rev.

Figure 1. 1716-1729 cut quarter Spanish Two Real.



a. Obv.



b. Rev.

Figure 2. 1764 cut eighth Spanish colonial "Piece of eight".



a. Obv.

b. Rev.

Figure 3. Copper Virginia Half-penny.



a. Obv.

b. Rev.

Figure 4. 1781 Spanish colonial One Real with hole.



a. Obv.



d. Rev.

Figure 5. 1783 Irish Half-penny, bent, shown with lead shot.



Figure 6. No date cut Spanish Two Real with hole.



Figure 7. 1818 Coronet Large cent.



Figure 8. 1809 Classic Head Half-Cent.



a. Obv.

b. Rev.

Figure 9. 1797 Draped Bust Half-dime.

## CHAPTER FIVE

### Study Objective, Methodology and Data

#### Objective of This Study

The objective was two-fold: first, to determine whether patterns could be graphically, or visually, depicted for a group of individual coin finds, and second to explain any resulting patterns archaeologically and historically. Artifact distribution studies in archaeology proliferate; what gives this analysis research potential is the particular methodology applied to a relatively unexplored artifact type, with ample documentary sources available for verification and explanation.

#### Methodology

Due to the small size of the database, statistical analysis was not applicable. Statistical studies of coins are best applied to coin hoards of hundreds or thousands of coins comprising a large enough database to eliminate outliers. One statistical study with a large coin assemblage might, for example, yield a pattern of relative frequency of individual issues within a coinage. Studies of this type when applied to classical coin hoards are of great interest to numismatists, but are not useful for archaeologists studying the smaller coin assemblage at Monticello.

A graphics approach was conducted of the 43 excavated coins

found at Monticello. Information on each coin was compiled in seven categories: coin type (denomination), size, coin date, context, content, site location and layer depth (Table 1). The information was then coded into a matrix using Harvard Graphics software on a PC computer. The result was a series of graphs in which the total coin assemblage was plotted in different combinations of from one to three of the seven information categories. For example, all 43 coins were plotted by size and type in one graph, in another all 43 were plotted by mint date versus context date, etc. Each graph revealed visible coin patterns for which inferences are possible.

A brief explanation of each of the variable categories listed in Table 1 follows: a) coin type: seventeen types were recorded by nationality and denomination; b) coin size: to place cut coins on a comparable basis with whole coins, the area of each coin was calculated using the formula for the area of a circle,  $\pi R^2$ , where R=radius of the coin; the result was then divided by 4 and 8 to obtain the area for one-quarter and one-eighth cut coins. Areas ranged from approximately 50 mm.<sup>2</sup> to 950 mm.<sup>2</sup>; c) coin date: the three coins with unreadable mint dates were included in overall analysis, but excluded from graphs using this variable; d) coin context: the Terminus Post Quem date assigned the specific layer a coin was found in, whether by using the coin date or another artifact; e) site location: sixteen sites where coins were found were recorded; f) layer: Monticello's system uses single letters of

the alphabet to label layers, followed by double letters. So, topsoil is the most recent layer, followed in descending order by a through j; aa, ab and so on are the deepest layers; g) content: the coins were all either copper, silver, copper/silver or copper/nickel in composition.

#### Distribution of Coin Finds

Fourteen coins were found either on or within the foundations of quarters along Mulberry Row and l in Building A in the Kitchen Yard. With the exception of the four coins found to the north of the main house and in the vineyard, 22 coins were found in yard areas and two in the Dry Well. The densest clustering of coin finds were in and around servants' quarters on Mulberry Row and the west Kitchen Yard, two areas of the most intense activity on the mountaintop (Fig. 10). A mix of colonial and federal coins of widely ranging dates were found at at all site locations (Table 1).

#### Data - Coins at Monticello

Descriptions of each site, the coins found at each locale and contextual information pertaining to each coin find follows.

#### Fenceline between Buildings C and D:

Two sets of fence postholes were found, along with complex stratigraphy and artifacts associated with the adjacent series of

Jefferson-period craft shops, servants' quarters and utilitarian outbuildings called Mulberry Row (Kelso 1984:164). One earlier set of 1796 postholes incorporated the south walls of Mulberry Row buildings, while a later 1809 fenceline ran through and therefore postdated at least one building (Kelso 1984:165).

An 1806 U.S. Liberty Head one-cent was found in topsoil between Building C (Joinery) and Building D (Nailery) in a trench running along what was a wood paling fence running east-west along the length of Mulberry Row, abutting the south walls of some of the buildings. The context date is 1806.

#### Building L:

Building L, otherwise known as the Storehouse, was a 16' x 10.5' wood structure which underwent a series of different uses. Mean ceramic dating suggests a 1779 date for construction; use as a nailery by 1782; used to store nailrod in 1796, according to the 1796 insurance plat; and in ruins possibly as early as 1801 (South 1977:201-252 in Kelso 1979-1981:64). The building was definitely gone by 1809, as it does not appear on the insurance plat for that year. Faunal analysis of bone refuse reflects poor quality cuts of meat were being consumed, inferring occupation as a slave quarter (Crader 1984:548).

One quarter of a Spanish Two Reales, date unknown, was found in layer a of a balk just west of center near the hearth inside

Building L. The context date is 1957.

Building M:

Building M, the Smokehouse/Dairy, was a 44' x 16.5' rectangular dry laid stone foundation structure, probably log. A 1781 Spanish Real dated construction to post 1781; English banded pearlware suggested occupation from 1780-1795; brick paving, a firepit and a sump, necessary for dairying, were later additions to the building and indicate change from a domestic dwelling to industrial use; and recovery of English ironstone from the building destruction level indicate the building was gone by at least 1813. Since it does not appear on the 1809 insurance plat, it may have been destroyed earlier than 1813 (Kelso 1979-1981:52-56).

Three U.S. Liberty Head one-cent pieces were found in Building M. One, dated 1818 with a context of post 1818, was found in layer a of a trench running directly over the south wall stone foundation. A second, dated 1808 with a context of post 1830, was located in layer b, south central over the stone foundation. A third, dated 1817 with a context of post 1817, came from layer a along the fenceline directly south of the building. A U.S. Liberty Head half-cent was also found in Building M, dated 1809 with a context date of 1810, from layer a along the fenceline south of the building.

A Spanish One Real, dated 1781 with a context of 1795, came from layer a within the interior cornerstones of Building M. A

Spanish (possibly Mexican) One-Half Real, dated 1777 with a modern context of post 1900, was found in layer a just above the 1808 Liberty Head cent mentioned above.

#### Yard between Buildings O and N:

Due to the extremely close proximity of buildings along Mulberry Row, the yard areas between structures were very small. The yard between Building O (servants' quarters) and Building N (washhouse) is a distance of 38'. Building O was 20.5' x 12' of wood with a wooden chimney and earth floor. Excavations revealed a back-filled stone-lined cellar and small rectangular brick "box" centered on the eastern end of the foundation (Kelso 1982-1983:2). English creamware suggests occupation during the 1770's, and leveling took place post 1800. Butchered animal bones reflect lesser affluence by occupants, but not as poor a diet as found elsewhere on Mulberry Row (Kelso 1982-1983:11). Less is known of the washhouse: it was originally built as a washhouse but is surmised to have been used at a later date as a domestic dwelling.

An Irish half-penny, dated 1783 with a context of post 1783, was found in layer aa in a test unit in the yard area between Building O and Building N.

#### Buildings R,S and T:

Activities associated with modern strata above servants'

quarters R, S and T had disturbed the site area and compressed the remaining stratigraphy (Sanford 1984-1985:20). Very limited structural remains of R and T survived as a result; S was more intact. The three structures, built in 1792-93 and occupied until at least 1796, were identical: 12' x 14', with a dirt floor, wooden chimney and subterranean root cellar near the hearth. Very little of R was extant, but period artifacts confirmed its existence (Sanford 1984-1985:22). Earlier dated creamware inferred an earlier occupation of R than S.

S had the most physical remains: stone foundation, remnants of a stone chimney base, earth floor construction, wood-lined root cellar (Sanford 1984-1985:26). The presence of transfer-printed pearlware, press-molded bricks and whiteware placed occupation of the building as late as the 1820's.

The artifacts in T placed occupation at between 1790-1810, with a TPQ for backfilling of the root cellar at post 1795 (Sanford 1984-1985:24). Faunal analysis showed that occupants of S were eating poor cuts of meat much like Building L's occupants, while servants in T had slightly better cuts similar to Building O's occupants (Crader 1984).

Two U.S. Liberty Head one-cent pieces were found in Building R. One, dated 1793 with a context of post 1793, was found in layer ab in the interior of R. The second, dated 1806 with a context of post 1850 was also found in the interior of R.

One-quarter of a Spanish Two Real, date unknown with a context of post 1915, was found in layer aa in a balk inside Building R. One-quarter of a Spanish One-Half Real, dated 1772 with a context of post 1820, was found in layer aa inside structure R.

Two U.S. Liberty Head one-cent pieces were found at the bottom of the slope to the south of and between Buildings R and S. One, dated 1817 has a context of post 1817, and was found in layer e; the second, dated 1816 has a context of post 1820 and was found in the same layer. These are the contexts used for purposes of data analysis; however, there is reason to believe the contexts might both be somewhat earlier, possibly post 1790.

One quarter of a Spanish Two Real, dated 1733 with a context of post 1780, was found in layer h in a balk in the yard area of Building S. A Spanish (possibly Mexican) One-Half Real was also found in Building S in layer b, dated 1772 with a context of post 1970 due to disturbed stratigraphy and the presence of other very modern artifacts.

A U.S. Liberty Head half-cent was found in layer j of root cellar fill in Building S, with a date of 1809 and a context of post 1809. A U.S. Indian Head one cent, dated 1882 with a context of post 1882, was found just outside the west wall of Building S in layer aa. A U.S. Two Cent piece, dated 1868 with a context of post 1868, was found in layer h also outside the west wall. Field notes indicate that though the 1882 coin was found in layer aa and

therefore should have been below layer h, the 1868 coin was in a deeper layer.

A Virginia half-penny, dated 1773 with a context of 1820, was found in the yard area between the two structures S and T in layer c.

A U.S. quarter dollar, dated 1916 with a context of post 1916, was found in topsoil inside Building T.

#### Kitchen Yard West:

Artifacts date this portion of the Kitchen Yard to post 1770. A dry well was dug in 1770, but filled-in and abandoned in 1771 when Jefferson decided to put dependancies elsewhere (Kelso 1979-1981:76). A backfilled ditch was located, probably filled-in in 1803 when the kitchen yard became obsolete. Overlaying the filled-in ditch is an unidentified structure called Building A, 15.6' x 20.6', suggesting a slave dwelling. English shell-edged pearlware confirmed the later construction of the structure (Kelso 1979-1981:78-83).

A Virginia half-penny, dated 1773 with a context of post 1830, was found in layer c of a balk in the south-central area of the Kitchen Yard.

A U.S. Liberty Head half-dime, dated 1797 with a context of post 1830, was found in layer c just to the east of the unidentified structure. This building does not appear on the 1796 insurance plat

but is conjectured to be a servant's quarters. A U.S. Liberty Head one cent, of unidentifiable date with a context of post 1850, was found in topsoil of a balk running over the south foundation of the mystery building. A U.S. Lincoln one cent was found in topsoil, dated 1914 with a post 1914 context, just to the north of the Dry Well. Also to the north were two U.S. Indian Head one cents, one dated 1870 with a context of post 1914 in topsoil, the second dated 1863 with a context of post 1863 in layer b. A U.S. Shield five cents was found, dated 1866 with a context of post 1866 in layer a just to the north of the Dry Well.

Dry Well:

The Dry Well, dug in 1770 and filled-in in 1771, was 18.11' deep with 8 layers of fill. Jefferson originally intended to use the structure to store fruits and vegetables, but changed its location almost immediately and had it filled-in. The artifacts were mostly kitchen refuse. Faunal analysis concluded that the bones found came from meals served in the Jefferson household, i.e. better cuts from roasts (Crader 1984:555). There is reason to question the assumption that all artifacts in the fill came from the main house. Slaves possibly lived in the basement and south wing dependencies of the main house closest to the Dry Well in the 1770's, generating some of the refuse (Kelso 1982-1983:19).

One-eighth, or a "bit", of a Spanish dollar (possibly Mexican)

was found in layer h in the Dry Well, dated 1764 with a context of 1795. One quarter of a Spanish Two-Reales was found above the 1764 bit in layer b, dated 1746 with a context of post 1830.

Kitchen Yard East:

Several yards east of the Dry Well area, a stone walkway was uncovered. Running north-south from the south all-weather passageway entrance to the path running in front of the Mulberry Row buildings, the walkway was disturbed by modern utility trenches. It remains questionable whether the fill was Jefferson or Barclay period or 20th century.

The following coins, all U.S. issue, were found in the walkway area. A U.S. quarter dollar, dated 1877 with a context of post 1877, in topsoil. A U.S. Liberty three cent piece, dated 1867 with a context of post 1970, found in layer c of a modern pipe trench. A U.S. Indian Head one cent, dated 1884 found in a disturbed layer b so assigned a context of post 1970. A U.S. Liberty half-dime, dated 1858 with a context of post 1858, came from layer h but the area was very disturbed, making the context date questionable. Three five cent pieces were found: a U.S. Shield five cents, dated 1867 with a context of post 1867, found in layer b in a midden layer; a U.S. Liberty five cents, dated 1891 and found in the same disturbed layer as the 1884 Indian Head cent, again a context of post 1970; A U.S. Indian Head nickel, dated 1916 with a context of post 1916, found in

layer f of Jefferson-Barclay period fill. A U.S. Indian Head one cent was found in topsoil, dated 1870 with a context of post 1914.

Privy Area:

One quarter of a Spanish Two Reales was found, dated 1716 with a context of post 1740, in layer e of a posthole just outside the stone privy on the north side of the main house.

North Yard/North Pavilion Area:

Running north from the north pavilion, then taking a sharp turn to the west was a below ground barrier constructed in 1814. Known as a "Ha ha", the 4 ft. wide, 3 ft. deep ditch served as a cattleguard in keeping livestock out of the west lawn. It was possibly destroyed by Barclay in the 1830's when he put the lawn to the plow. It was determined that backfilling was deliberate rather than due to erosion. (Kelso 1979-1981:47).

A U.S. Liberty dime was found in topsoil near the north wall of the north pavilion, dated 1920 with a context of post 1940. A U.S. Indian Head one cent, dated 1888, was found inside the "ha ha" in layer a of modern fill, downslope from where the 1920 Liberty dime was found.

Vineyard:

The central section of the south slope was first planted in the

early 1770's. It is unknown at what point viticulture ended.

A U.S. Indian Head one cent was found in topsoil, dated 1875 in a highly trafficked and probably disturbed area, with a modern context of post 1950.

## CHAPTER SIX

### Graph Results, Analysis and Discussion

#### Graph Results

Forty-three coins were found at Monticello (Table 1; Fig.11). The most frequent occurrence was the Liberty Head cent (n=9; 20.9%); followed by the Indian Head cent (n=7; 16.3%); and cut Spanish Two Reales (n=5; 11.6%). Twenty-two other coins occur less than four times each, making-up the remaining 51.2%.

Figure 12 shows coins split by size classes of 50 square millimeters. Seven coins were cut coins (darker shading) and 36 coins were whole. Two arbitrary size groups can be visualized in this figure: small coins (less than 375 square millimeters), and large coins (greater than 375 square millimeters). The small size coins are depicted in Figure 3: Spanish Half Reales (IX); Spanish Two Reales (III); Spanish Bit (IV); U.S. Half Dimes (VII); Liberty Dime (XVI); Liberty Three Cent (XIII); Indian Head Cents (XII); Lincoln Cent (XI); Indian Head Nickel (XVII); U.S. Five Cents (XV); and Spanish One Real (II). The large size coins are represented as follows: Liberty Half Cents (VI); U.S. Two Cents (XIV); U.S. Quarter Dollars (X); Virginia Half Pennies (VIII); Irish Half Penny (V); and Liberty Head Cents (I). Type I, Liberty Head Cents, split into several categories in the large range since sizes of this coin varied over time from 616 to 910 square millimeters.

Figures 13a and 13b show the relationship between coin size (X axis) and value in cents (Y axis). Figure 13a plots the 29 base metal coins; Figure 13b plots the 14 silver coins. There is a weak negative relationship between the size and value for base metal coins. In other words, the larger the coin the lower the value, although if you exclude or eliminate the outliers, the trend line evens-out and the result is that large or small base metal coins have much the same value. There is a positive relationship between size and value for silver coins, or, the larger the coin the higher the value.

Figure 14 shows the relationship between X and Y: size of coin (horizontal axis) and coin date (vertical axis). Disregarding cut coins (denoted with an \*) there is weak correlation between these two variables for the data, although a slight tendency can be seen for modern coins (post-1857) to be smaller. Disregarding the cut coins, the smaller coins mostly post-date 1857, the date at which the federal system went into full legal effect (foreign coins no longer accepted).

The X axis of Fig. 15a shows the distribution of coin mint dates in 10 year increments. The Y axis shows the number of coins found within the range of dates. Three groupings of coins resulted: those minted earlier than Jefferson occupation (n=4), those minted during Jefferson occupation (n=18) and those minted during the Levy period (n=18). Three coins with unreadable dates were excluded from

this graph. No coins with mint dates of the Barclay period were found. The Jefferson, Barclay and Levy periods of occupation have been marked "JP", "BP" and "LP" in Fig. 15a.

Figure 15b's Y axis shows the number of layers that contain coins grouped in ten year increments (X axis). It is important to remember that all layer dates are minimal dates, not exact dates. That not all layers containing coins were dated by those coins results in a shift to the right of Figure 15b from Figure 15a.

Figure 16 is a scatterplot which illustrates and compliments Figures 15a and 15b, showing which coins (X axis) were actually used to date layers (Y axis) and which were not. Eight rectangles marked with roman numerals define combinations of periods in which coins were minted and/or dated layers: I - coin date is pre-Jeffersonian and context date is "anytime later than 1745" (n=1); II - coin date is pre-Jeffersonian, context date is Jeffersonian (n=3); III - coin date and context date are Jeffersonian (n=12), seven coins date their layers; IV - coin date is Jeffersonian, context date is Barclay period (n=3); V - coin date is Jeffersonian, context date is Levy period (n=2); VI - coin date is Jeffersonian, context date is post-Levy or modern (n=1); VII - coin date and context date are Levy period (n=12), ten coins date their layers. VIII - coin date is Levy period, context date is modern (n=6).

Figure 16 reveals that only 17 coins out of 43 (or 39.5% of total coin finds) found at Monticello, were used to date the layer

they were found in. There seems to be no tendency for only older or only more recent coins to be used to date layers. The 17 coins used to date layers are evenly distributed within the period of occupation of Monticello as a private residence, from 1770 - 1923.

The relation between layer depth (X axis) and distribution of coin date (Y axis) is seen in Fig. 17. Random deposition of coins in the archaeological record and site disturbance produce too great a variation of the data to draw strong conclusions. At best, only in general are older coins found in deeper layers.

Figure 18 looks at the ceramic vessel count (X axis) in relation to the number of coins found (Y axis) by site. Sites where little or no ceramics were found and/or no ceramic analysis was conducted following excavation were excluded, leaving only 23 coins from the Dry Well and buildings L, M, O, R, S and T available for analysis. A positive relationship exists between number of coins found and ceramic vessels.

### Analysis and Discussion

#### The Archaeological Record Versus the Historical Record

The importance of using historical documentation whenever possible to test the coin archaeological record at Monticello proved vital. Coin loss may indicate a valuable commodity being placed in safe-keeping during lean times; likewise it may also indicate saving, during plentiful times, for leaner times. It is fortunate

that documentation for the 18th and 19th centuries is much more abundant than for the preceding centuries, and that it is Monticello being studied with its enormous amount of documentary minutia on plantation life. When you have only the coins themselves, unequal survival of coins, unequal recovery of coins, changes in the currency system, the presence of other mediums of exchange and the fact that the sort of coinage lost is probably "small change" and thus not representative of all types of coinage in use at a given time, the job of interpretation becomes much more difficult (Casey 1986:115). Excavated coins tell only part of the story; the historical record is needed to determine if what we find is truly representative. Since we have abundant sources pertaining to Monticello, the results of this study could prove useful to archaeologists studying coins from other documented sites.

#### Monticello's Coin Assemblage

The 43 coins excavated at Monticello qualify only as an "accumulation", not a "hoard". Although the minimum size for a hoard is two coins, to be called a "hoard", coins should have been brought together in a deliberate manner. This excludes coins which have accumulated in archaeological strata over a period of time by loss or chance (Casey 1986:51) as is the case at Monticello.

Although an accumulation implies that the coins are not related, the assemblage must still have comparability. Coins from

a fort should not be compared with coins from a town site or a religious with a domestic site because the two will have experienced different monetary regimes, possibly at different times. Monticello is less of a problem in this respect since it was inhabited by people united for a common cause during the time it was a working plantation. The coins found are, with the exception of the four found in the Joinery/Nailery yard, the vineyard and the north yard area, all from either domestic dwellings or living areas connected to the main house and thus have comparability (Figure 10).

#### Coin Assemblage Size

Forty-three coins appear at first to be a large number of unrelated coins to be found on a plantation site (as opposed to a tavern or merchant site where constant monetary transactions increased chances for coin loss). The coin assemblage size takes on a new perspective, though, in terms of representing two separate coinage systems spanning 150 years of site occupation by a large number of residents and visitors for most of that time. In short, at Monticello, the relativity of the surviving coinage to the original volume of coins in circulation is minimal.

Three reasons explain the small number of coins at Monticello. It is logical to assume that coins, which were scarce until the late 19th century, were highly valued and it is probable that they were kept safe from loss. During colonial times money was kept in purses

making the loss of a coin during play or work less likely.

Another explanation for so few coins presents an unresolvable bias in the archaeological record. Until recently, successive issues of coins were produced by melting down their predecessors. In 1857 when all foreign specie was declared illegal in the U.S., it is reasonable to assume that a great deal of foreign silver was re-struck into standard federal coins. (It can be inferred that foreign currency such as Spanish Reales deposited after that date, having missed being re-struck, had undergone a change in value from monetary to talismanic, and had become a luck token or part of someone's private collection of old coins.) What did not end up in the archaeological record speaks volumes; we have, however, little or no way of hearing what it has to say.

At Monticello, as at many sites, the combined restraints of money, manpower, time and research priorities dictate what and how much of a site are excavated. At Monticello, the 12-year history of archaeology has placed priority on uncovering landscape features and evidence of domestic life and industry directly connected with the main house. The 43 coins found were lost by house servants along Mulberry Row, occupants of the main house and/or the occasional visitor to the mountaintop. Little is known of the number of laborers residing at Monticello during Levy's time, but what of the 100 plus slave field hands under Jefferson? Should archaeology focus on this neglected group, it is reasonable to assume that the

coin finds might increase. In sum, the archaeological bias at Monticello allows us to infer that the 43 coins found are likely not representative of the total number of coins lost. It is equally probable that coin assemblages found at other historic sites which have not been excavated in total may suffer from this same bias.

#### Coins As Chronological Tools

Studies of hoards reveal currency and detailed site occupation chronologies whereas studies of accumulations only delimit the beginning and end of an occupation period. A decade or so of sparse/heavy occupation will not greatly alter the general pattern of an accumulation because people who reoccupy the site after a lull will possibly bring coins with them that were in circulation during the lull (Laing 1969:87). For example in Figures 15b and 16, coin context dates show a gap in activity during the 1830s, a time when the property was actually occupied, and indicate steady activity throughout the 1860s and 1870s, years of virtual abandonment. So, while the overall pattern is likely to present a fairly accurate picture of beginning and end of human occupation, an accumulation is not very reliable for highlighting specific occupation trends over time.

As a rule, few coins found might indicate sparse or even abandoned occupation; more coins, intense occupation. But chronic coin shortages in the money system during most of Monticello's

occupation probably explains why relatively very few coins were lost during either heavy or minimal occupation. Figures 15b and 16 show a fairly even deposition of coins throughout Monticello's history, but coins cluster somewhat more during the Jefferson-Levy period. The best we can say is that Monticello's coin accumulation marks the beginning (Jefferson residency beginning in 1768) and the end (Levy sale of property to the Foundation in 1923) of people living on the mountaintop.

#### Coin Deposition

Coins are not necessarily like other artifacts. Coins in the archaeological record are not as easy to read as ceramics; predictable loss of popularity and/or breakage of the latter allow certain time-lag rules to be applied in understanding deposition. Coins did not lose popularity; they either were used until declared illegal, worn-out or melted-down and restruck. They were not discarded unless they ceased to fulfill their original function; if they never lost value, then finding coins at a site means they were probably lost - "de facto" refuse.

Longevity of coins in the system and unpredictable loss wreak havoc on setting rules for coin deposition. Basically, there is no set rule for how long a coin is in circulation before becoming part of the archaeological record. Since all coins, including old foreign coins and new federal coins, were in use simultaneously

between 1792 (establishment of federal mint) and 1857 (all non-federal coins declared illegal), deposition was not chronological according to coin mint date (Figures 16 and 17). For example, an 1806 federal coin could have been deposited in an 1807 layer, while a 1742 Spanish real, still legally in use at that time, could have been deposited in a later layer. The result: the more modern coin ends up in an earlier layer than the older coin.

Looking at layer versus coin date (Figure 17), only very generally do older coins appear in deeper layers. The nearly horizontal line through the graph marks the trend for older coins to be found in deeper layers, but is not a strong trend line by any means. Casey (1986:78) makes the point: "...clearly there is no very close correlation between the coins in the individual phases and the dates arrived at by considerations of relative archaeological stratigraphy...coins found in redeposited or intrusive contexts may very well be extremely mixed in date...they do not represent a currency horizon, only a taphonomic phase".

There are other complications. Along with long residuality of coins is the fact that certain denominations had longer circulatory lives than others. Reales were accepted for hundreds of years while many federally minted denominations, such as the early Liberty Head large cents, underwent constant changes and cancellations. Monticello was built and occupied during one of the most complex and confusing money system transitions in American history, with old and

new systems' monies acceptable simultaneously. A cautionary note: it is easy to misinterpret the appearance of a coin type in the archaeological record as evidence of its continued use when it actually may indicate coin disuse or vice versa.

#### Coins As Historical Markers

The coins as a group show changes in the nature of currency metal content and valuation. If we look at the 43 coins, marked change in appearance occurs over time. Figures 13a and 13b plot the size and value of base metal coins (copper and copper/nickel) and silver coins. In Figure 13a, no relationship exists between size and value through time, meaning that large or small, base metal coins did not differ much from each other in value. Twenty-five of the 29 base metal coins are federally minted coins. In Figure 13b, the positive relationship between size and value for silver coins means that as size of coin increased, so did value. Ten of the 14 silver coins are colonial (i.e. pre-federal) coins.

These patterns reflect the historical change in content and valuation of federal versus colonial coins: most of the colonial coins were silver and were valued by size and weight; most of the federal coins were base metal and valued symbolically at "face" value, making size and weight irrelevant. The change in valuation during the federal period may be an effort to curb the exportation of specie to obtain better exchange rates elsewhere. The change in

content may reflect the chronic silver shortage throughout much of the 19th century.

Having shown the visible pattern differences between colonial coin valuation and federal coin valuation in Figures 13a and 13b, Figure 14 plots the resulting change through time of coin size. A horizontal line was drawn at the year 1857 to mark the point after which only federal coinage was in use. Below the line shows the earlier colonial, mostly silver coins which varied greatly in size since value was predicated on weight. After 1857, when weight was not a key to value, coins gradually became smaller.

#### Coins as Dating Tools

Coins are good dating tools at Monticello, but with provisos. At best, a coin in a sealed context dates the deposition of all the material stratified above it to a date later than the production of the coin, i.e. provides a TPQ date. Two circumstances interfere with this neat system. (1) Site disturbance can cause coins of an earlier deposition to become redeposited later, meaning that other artifacts become better dating tools. For example, a 1772 Spanish Half Real was found inside slave quarter S in the same layer with concrete and a bottle top. Disturbances such as this are not unusual at Monticello, making the "deeper-the-layer, older-the-coin" rule applicable only in the most general sense. (An excellent discussion of coin redeposition is presented in Heldman's 1980 article on Fort

Michilimackinac's French and British occupation). (2) Residuality of coins in the system meant that coins retained their value for extensive periods of time, sometimes remaining in the currency system for hundreds of years before deposition. Considering that both site disturbances and long residuality of coins are elements present at Monticello, 17 out of 43 coins being used to date the layers they were found in is a high percentage (Figure 16).

The coin mint dates fairly evenly span the entire period of occupation of Monticello (Figure 15a), with only slightly more than half the coins found deposited in later layers (Figure 15b) where other artifacts were used to date the layers. Seven of the coins minted during Jefferson occupation and deposited during that time were used to date the layer they were found in; while 10 of the Levy period coins dated their layers (Figure 16).

The use of coins as dating tools rests on several factors, but most important is the relationship of the coin to other artifacts in its context. For example, a 1716 coin found with a piece of handpainted pearlware is useless as a dating tool. Change the date of that coin to 1795 and it dates the layer. Find a piece of whiteware in that same layer with a TPQ of 1813 and once again the coin has been preempted by the ceramic. The value of coins as dating tools is a combination of how quickly they were deposited after minting, what other artifacts they are found with, condition of coin (is the date readable?) and whether the site or layer has

remained undisturbed. Still, coins unlike other artifact types have definite dates, immediately giving coins better odds for dating layers they are found in.

That coins at Monticello are good dating tools is supported by looking at specific sites where coins were found (Figure 18). At these high activity sites, as greater numbers of coins were found, so were larger quantities of other datable artifacts, such as ceramics. When nearly 40% of one artifact type is used to establish layer dates, out of a total of only 43 objects of a type in an assemblage, we can confidently state that coins are, when available, the preferred dating artifact.

One footnote, however: coins, though often used to date the layers in which they are found does not mean that coins are good at establishing overall site dates. Only layers in which coins were found were considered in this study and those layers comprise only a small percentage of all layers excavated at Monticello. As previously discussed, the small coin assemblage of only 43 coins can do little more than define the beginning and end of human activity at Monticello. Layers dated with coins play only a very small role in a much larger picture which includes many other non-coin layers in setting an occupation date range for specific buildings.

#### Coins As Representative of Denominations In Use

Most of Monticello's life has been under the federal regime, as only 13 out of 43 coins found are from colonial days. That few

British coins are found on North American sites (Noel-Hume 1969:154) appears to be born-out at Monticello: only one Irish half-penny turned up. Denominations minted the longest were Liberty Head cents, minted continuously for 64 years from 1793-1857 and Indian Head cents minted for 50 years from 1859-1909 (Ruddy 1988). Nine of the former were found at Monticello and seven of the latter, by far the largest type categories in number (Figures 11 and 12). Whether these numbers are proportionate to the quantities of coin in use at large during those times is unknown, since successive issues of federal coins were often later restruck.

The re-striking of foreign coins into federal issue in 1857 also disqualifies any conclusion we can make about foreign coins as we have no way of knowing how many foreign coins at Monticello were melted-down. Knowing that Spanish silver was the preferred specie in the colonies and that 10 Spanish Reales were found at Monticello is, however, too numerically significant to be ignored. In general, taken as a group, it is probable that the coins at Monticello fairly represent the variety of small denomination types, if not the actual quantities, of money in use between 1770 and 1923.

It is necessary to remove oneself from 20th century values about money and to bear in mind the relative value of coins. A penny by today's standards is worth virtually nothing; it seems hardly worth the effort to retrieve it. But the buying power of a penny 150 years ago has no bearing on a penny's buying power in

1990. Consider, for example, that for 12.5 cents, Thomas Jefferson could buy two dozen eggs in 1772 or a chicken in 1775 (Jefferson's Account Books). The vast majority of coins in circulation during colonial times were small denomination, but at a time of constant coin shortages and within the plantation system where labor was not necessarily and in fact usually not paid, the loss of a small coin might represent a sizable portion of a person's personal means; a "small" coin thereby becomes a large loss.

#### Coins Versus Other Artifact Types

Figure 18 confirms strong correlation when coins are compared to ceramic vessels by site. Only sites where analysis of ceramics has been done and where coins were found were included in this analysis. Fifteen coins found in the kitchen yards east and west and five coins from the privy area, north yard, vineyard and between buildings C and D were omitted from this graph, since no ceramic analyses of these areas were available. It is probable that the total coin/ceramic relationship at Monticello would be strengthened by the additional data.

The graph shows that the number of coin finds increases in direct proportion to the number of ceramic vessels, or an average of one coin per every 72.83 vessels. Not surprisingly, living areas were the most highly trafficked, affording ample opportunity to break and/or dispose of broken ceramics, and lose coins amidst the

debris.

#### Coins as Indicators of Status

Finding a large number of coins in one location suggests a high degree of coin activity was taking place in one small area and that the area was one in which recovery of lost coins would be difficult. We cannot with authority say when every one of the buildings on Mulberry Row ceased to stand, so it is difficult to determine whether a coin lost at a particular locale was irretrievable amidst the rubble of a torn down/fallen down dwelling, had slipped through long vanished floor boards, or was trampled into a dirt floor. Trash from most of the buildings at Monticello made it out the door into the yard (Kelso 1982-1983:16) and it appears that coins often followed this pattern (Figure 10).

One of the more important findings to emerge from this study is the pattern of distribution the coins assume. Coins clustered in distinct and circumscribed areas. Although the coins are numerically insignificant, their pattern of distribution and its relationship to excavated buildings clarify status differences. Social status is not manifest in the value of the coins themselves, but rather by the fact of ownership of each coin and their distribution. Unfortunately, only the residents of the mountaintop during Jefferson's occupation are considered here; whether Uriah Levy owned slaves and how many and where they lived, or the number

of employees under Jefferson Monroe Levy is unknown.

Artifacts from Jefferson's slave quarters, interpreted in light of Jefferson period documents, reflect the social and economic hierarchy extant within Monticello's slave community (Kelso 1984-1985:2). Slaves normally received no pay, but there were various sources of income. Gratuities were passed out by visiting gentry. Jefferson tipped slave servants on neighboring plantations, and it seems credible that visitors to Monticello did likewise. Slave Isaac recalled being given money for opening gates leading to Monticello, and there are copious accounts of vegetables, poultry and eggs sold by slaves to Martha Jefferson and later to her daughter, Martha Randolph (MacLaughlin 1988:109). There are records of slave hands who worked at the nailery being paid \$2 a day (Bear 1967:69).

Non-free laborers being paid for services or goods does not appear to be exclusively a Monticello phenomenon. Williams (1969:56) discusses a Georgia plantation where slaves made baskets and did handwork for which they received payment, as well as being allotted one acre of ground from which cultivated produce could be sold. Though field hands were able to obtain some money through sale of produce, domestic servants and artisans seem to have had more opportunity for obtaining gifts directly from their masters. Williams makes an important point in suggesting that privileges such as money accorded slave domestics and artisans were as much rewards

for positions as for skills (Williams 1969:74).

We can infer that the skilled craftsmen and house servants living along Mulberry Row were at the top of the slave community hierarchical structure and as such may have received preferential treatment in the form of money. This is not to say that Jefferson's field hands did not receive gratuities or payment for services, but again, archaeology has not as of yet focused on this group and thus has no archaeological record with which to compare that of house servants and artisans.

Though not within the scope of this paper, an interesting follow-on study might look at the implications slave "wealth" had in terms of acculturation into the normative structure of white society.

## CHAPTER SEVEN

### Conclusion

The very nature of coins as part of a particular monetary period in history and later as part of the archaeological record of an historic site combines to make coins complex artifacts to study. Long residuality of coins in the system, uneven lifetimes of different denominations, unequal survival and recovery of coins, and the fact that most coins are "de facto" refuse, having been lost rather than broken, disallows standard rules for artifact interpretation. The time frame this study encompasses adds the additional obstacle of reconciling two overlapping and dissimilar monetary systems. Yet, found in large enough quantity and studied as a group, coin finds can and do show patterns. The 43 coins found at Monticello, when plotted on graphs, cluster in distinct patterns according to which variables are being analyzed. These patterns are explainable through a combination of historical fact and reasoned archaeological inference.

Coins at Monticello are good chronological tools for marking the beginning and end of site occupation, but the assemblage is too few in number to give a more detailed picture through time. We understand how and when coins were deposited through archaeological knowledge of artifact deposition. Historical records "flesh-out" the facts by pinpointing and explaining the why: interim site

occupation ebb and flow and such pertinent information as chronic coin shortages, helping to explain the small number of coins lost and thus found.

Coins are the preferred dating tool for layers in which they are found. Coins, unlike other artifacts, frequently have mint dates, providing an immediate advantage over other artifact types. However, it is by no means a given that a coin will supply the TPQ for a layer. How quickly a coin was deposited following minting, site disturbance, condition of coin and especially other datable artifacts found in the same layer impact the odds for using a coin to establish the TPQ. Additionally, although coins when found are usually the artifact of choice for layer dating, coin finds are so infrequent as to render their contribution relatively small in the larger scheme of overall site dating.

Although 43 coins are not proportional in number to amounts of circulating specie during the time under study, Monticello's coins are generally representative of types of small denomination coins that were most popularly in use. From this premise, looking at metal content of the various colonial and federal coin denominations, visual patterns point to historical events such as changes in the nature of currency. Coins clustered in distinct groups at given points in time; the historical record corroborates that these clusters mark valuation and metal content changes resulting from a change to federal from colonial monies.

Coins, not in value but where they are found, can infer social and economic status. A study of a similar plantation compared coin finds in the archaeological record of house servants and field hands, revealing that the former may have received preferential treatment in the form of money (Williams 1969). Coins found in Monticello slave quarters and/or areas of intense activity connected with these quarters, and in light of documents confirming slave access to monies, allows the similar inference that status at Monticello is manifest in ownership of a coin. Confirmation must, however, await a comparative artifactual database from Monticello's non-servant Afro-American populace.

This study offers the possibility that coins can and do extend beyond traditional use merely as dating tools. As such, coins assume their rightful position alongside other artifact types as viable objects with which to study the material culture of an historic site. With abundant documentation, as at Monticello, explanation and verification of coin patterns contributes to historical archaeology's methodology and offers research potential for similar coin studies at other well-documented sites. The results of such studies could build a database of coin patterns which would, in turn, provide valuable guidance for coin finds on sites where documentation is scarce or non-existent.

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**APPENDIX: TABLES AND FIGURES**

Table 1 - Description and provenience information on 43  
coin finds at Monticello.

**Table 1 - Monticello Coin Database**

Site Location	Denomination	Base(B)* Silv(S)	Cut(1) Whole(0)	Area (mm <sup>2</sup> )	Coin Date	Layer Date
<u>MULBERRY ROW:</u>						
Between C&D	Liberty Head Cent	B	0	908	1806	1806
Building L	Spanish Two Real	S	1	143	9999**	1957
Building M	Spanish Half Real	S	0	227	1777	1900
	Spanish One Real	S	0	314	1781	1795
	Liberty Head cent	B	0	661	1808	1830
	Liberty Half Cent	B	0	415	1809	1810
	Liberty Head Cent	B	0	616	1817	1817
	Liberty Head Cent	B	0	616	1818	1818
	Between N&O	Irish Half Penny	B	0	531	1783
Building R	Spanish Half Real	S	1	57	1772	1820
	Liberty Head Cent	B	0	616	1793	1793
	Liberty Head Cent	B	0	908	1806	1850
	Spanish Two Real	S	1	143	9999**	1915
Between R&S	Liberty Head Cent	B	0	616	1816	1820
	Liberty Head Cent	B	0	616	1817	1817
Building S	Spanish Two Real	S	1	133	1733	1780
	Spanish Half Real	S	0	227	1772	1970
	Liberty Half Cent	B	0	415	1809	1809
	U.S. Two Cent	B	0	415	1868	1868
	Indian Head Cent	B	0	284	1882	1882
Between S&T	Virginia Half Penny	B	0	531	1773	1820
Building T	U.S. Quarter Dollar	S	0	464	1916	1916
<u>KITCHEN YARD:</u>						
West	Virginia Half Penny	B	0	531	1773	1830
	U.S. Half Dime	S	0	227	1797	1830
	Indian Head Cent	B	0	284	1863	1863
	U.S. Five Cent	B	0	314	1866	1866
	Indian Head Cent	B	0	284	1870	1914
	Lincoln Cent	B	0	284	1914	1914
	Liberty Head Cent	B	0	616	9999**	1850
	East	U.S. Half Dime	B	0	201	1858
Liberty Three Cent		B	0	254	1868	1970
U.S. Five Cent		B	0	314	1867	1867
Indian Head Cent		B	0	284	1870	1914
U.S. Quarter Dollar		S	0	464	1877	1877
Indian Head Cent		B	0	284	1884	1970
U.S. Five Cent		B	0	330	1891	1970
Indian Head Nickel		B	0	314	1916	1916
Dry Well	Spanish Two Real	S	1	143	1746	1830
	Spanish "Bit"	S	1	157	1764	1795
<u>NORTH YARD:</u>						
Privy Area	Spanish Two Real	S	1	143	1716	1740
North Yard/ Pavilion	Indian Head Cent	B	0	284	1888	1970
	Liberty Dime	S	0	254	1920	1940
Vineyard	Indian Head Cent	B	0	284	1875	1950

\*Base = base metal; silv = silver

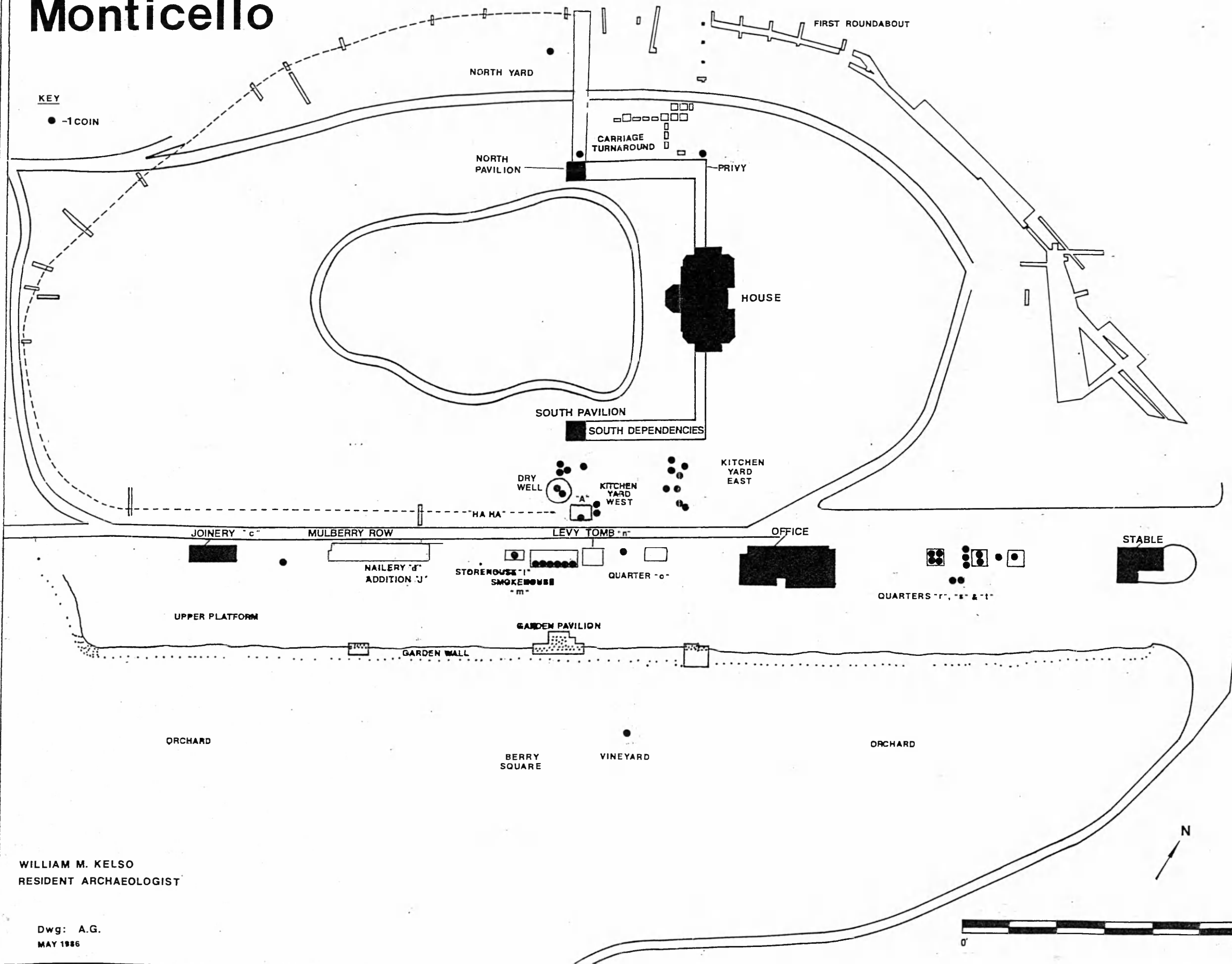
\*\*9999 = coin date unreadable

Figure 10 - Distribution map of coin finds at Monticello.

# Monticello

**KEY**

● -1 COIN



WILLIAM M. KELSO  
RESIDENT ARCHAEOLOGIST

Dwg: A.G.  
MAY 1986



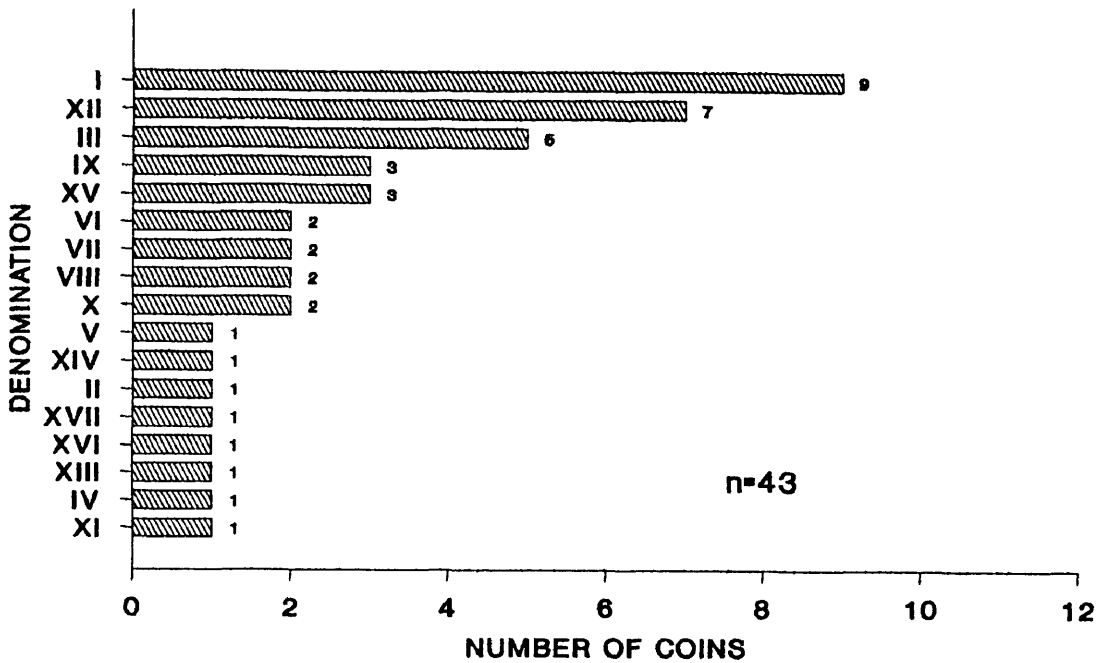


Figure 11 - Bar chart distribution of different denominations represented in Monticello's coin assemblage. Small numbers out to side of each bar are actual numbers of each denomination found.

Key to roman numerals:

- |      |                    |      |                      |
|------|--------------------|------|----------------------|
| I    | -Liberty Head Cent | X    | -U.S. Quarter Dollar |
| II   | -Spanish One Real  | XI   | -Lincoln Cent        |
| III  | -Spanish Two Real  | XII  | -Indian Head Cent    |
| IV   | -Spanish Bit       | XIII | -Liberty Three Cent  |
| V    | -Irish Half Penny  | XIV  | -U.S. Two Cent       |
| VI   | -Liberty Half Cent | XV   | -U.S. Five Cent      |
| VII  | -U.S. Half Dime    | XVI  | -Liberty Dime        |
| VIII | -VA Half Penny     | XVII | -Indian Head Nickel  |
| IX   | -Spanish Half Real |      |                      |

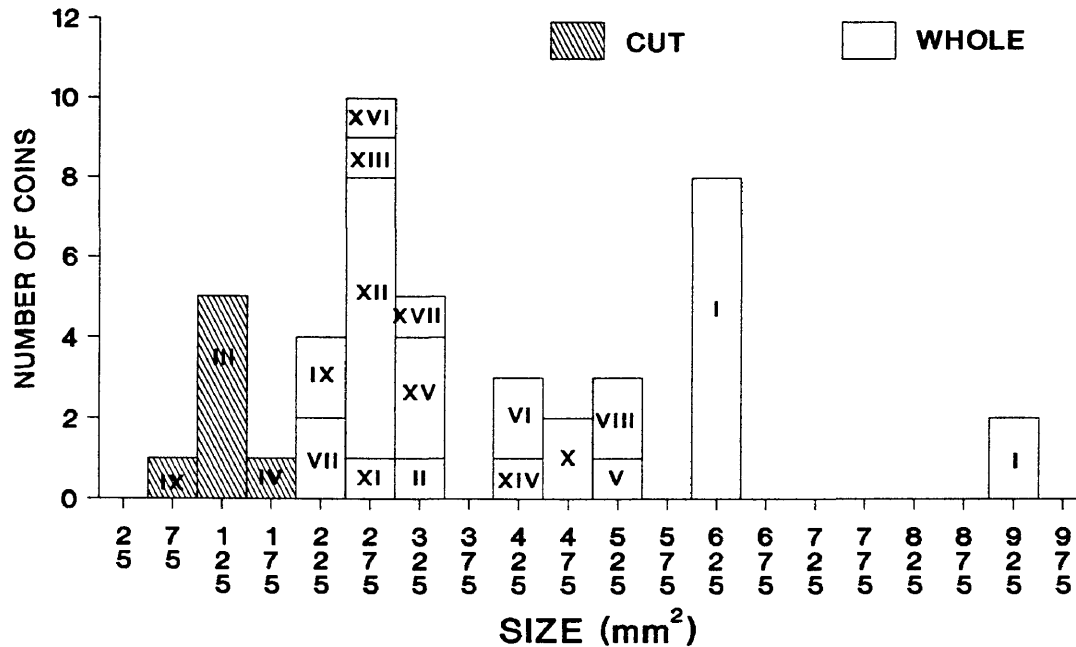


Figure 12 - Coin size distribution: number of coins (vertical axis) by their size in mm<sup>2</sup> (horizontal axis) and type/denomination (roman numerals). Example: one Spanish Half-Real (type IX) in the 50-100 mm<sup>2</sup> range in size.

Key to roman numerals:

- |      |                    |      |                      |
|------|--------------------|------|----------------------|
| I    | -Liberty Head Cent | X    | -U.S. Quarter Dollar |
| II   | -Spanish One Real  | XI   | -Lincoln Cent        |
| III  | -Spanish Two Real  | XII  | -Indian Head Cent    |
| IV   | -Spanish Bit       | XIII | -Liberty Three Cent  |
| V    | -Irish Half Penny  | XIV  | -U.S. Two Cent       |
| VI   | -Liberty Half Cent | XV   | -U.S. Five Cent      |
| VII  | -U.S. Half Dime    | XVI  | -Liberty Dime        |
| VIII | -VA Half Penny     | XVII | -Indian Head Nickel  |
| IX   | -Spanish Half Real |      |                      |

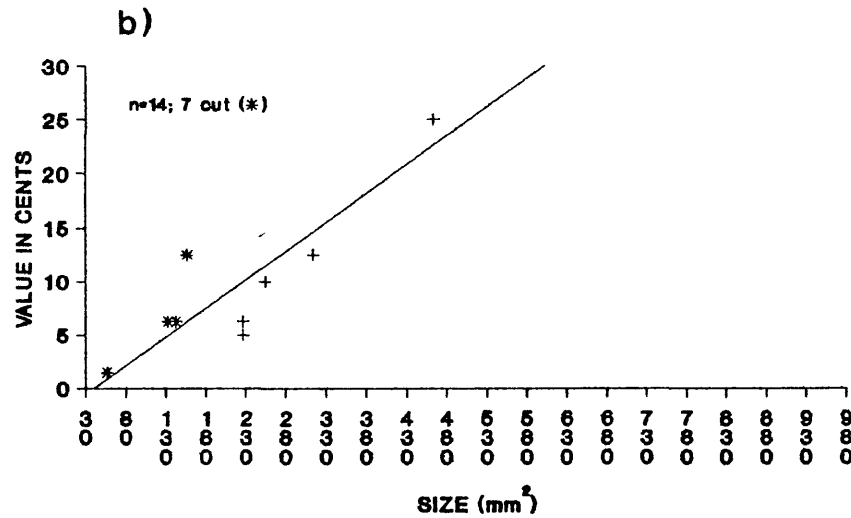
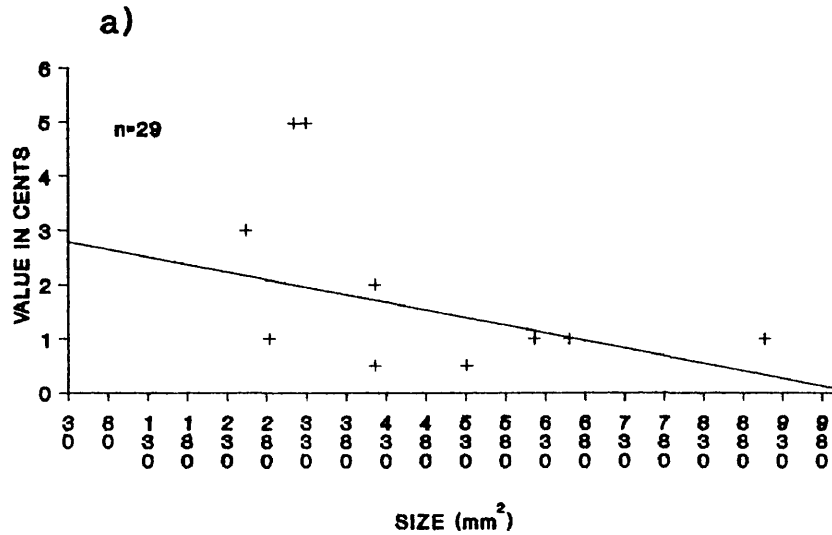


Figure 13a) - All base metal coins (29) plotted by size (horizontal axis) and value in federal cents (vertical axis). Almost horizontal trend line through graph shows that base metal coins were very close to each other in value, regardless of large disparity in size.

Figure 13b) - All silver coins (14) plotted by size (horizontal axis) and value in federal cents (vertical axis). Diagonal trend line through graph shows that size of silver coins was directly related to their value; the larger the coin, the greater the value of the coin.

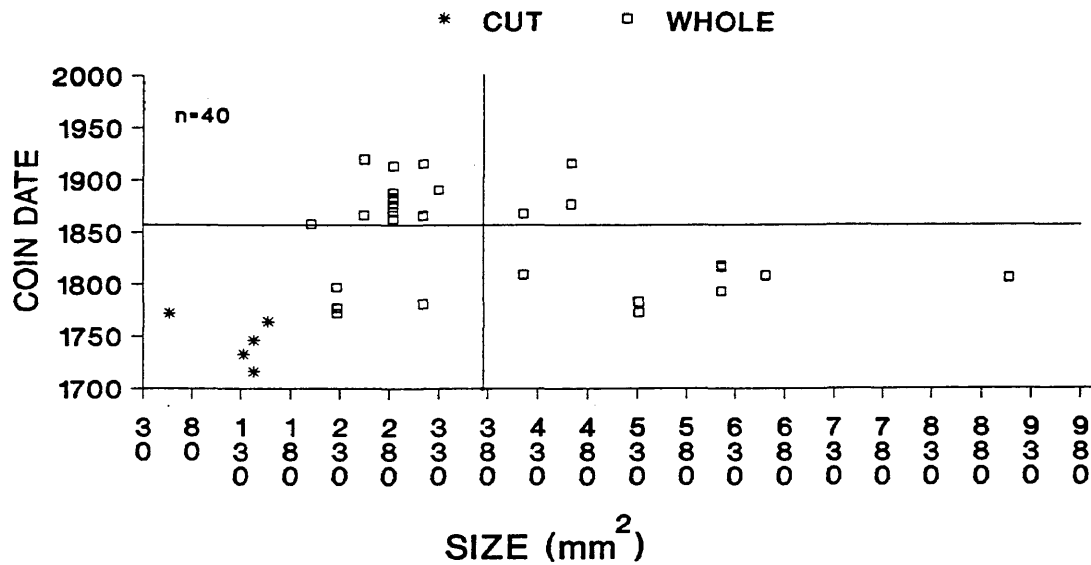
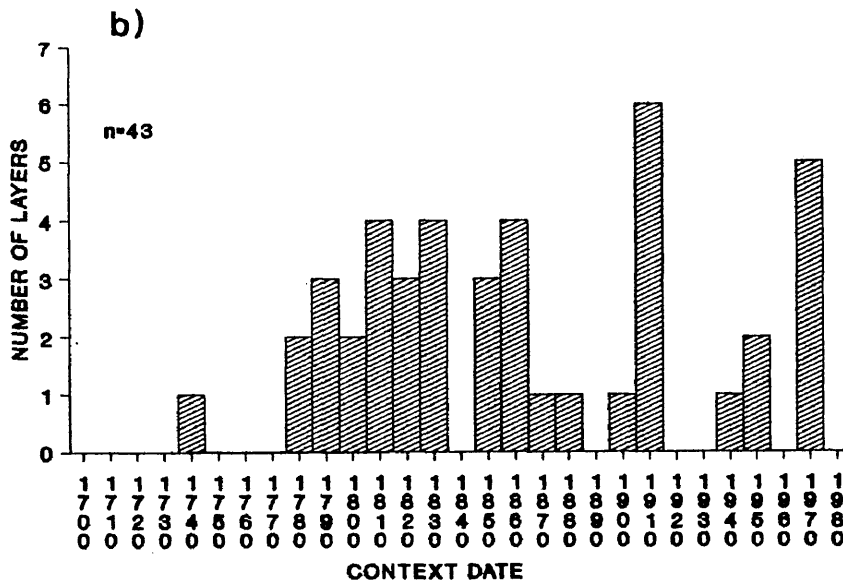
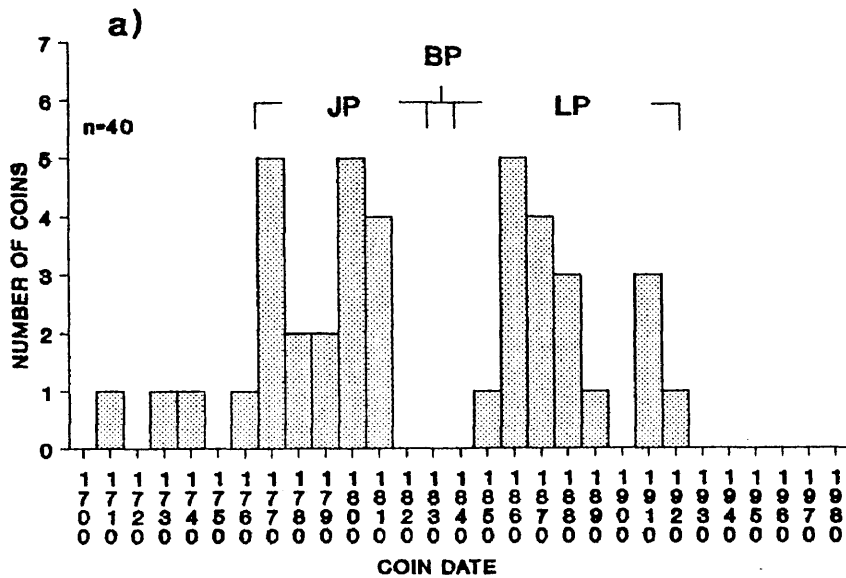


Figure 14 - Scatterplot distribution of each coin by size (horizontal axis) and coin mint date (vertical axis). Mid-graph vertical line divides "small" from "large" coins; mid-graph horizontal line marks official transition from colonial to federal monetary system in 1857.



**Figure 15a)** - Distribution of coin mint dates within ten year periods of time (horizontal axis), and how many coins were minted in those ten year periods (vertical axis). For example: one coin minted between 1755 and 1765; five coins minted between 1765 and 1775; etc. "JP", "BP" and "LP" at the top of chart show which coins were minted during the Jefferson, Barclay and Levy periods of occupation.

**Figure 15b)** - Distribution of number of layers (vertical axis) which contained coins and the context dates of those layers (horizontal axis) in ten year periods of time. For example: two layers with context dates in the period of 1775 to 1785 contained coins; three layers with context dates in the period 1785 to 1795; etc. Had all coins been used to date their layers, Fig. b) would shift to the left and be identical to Fig. a).



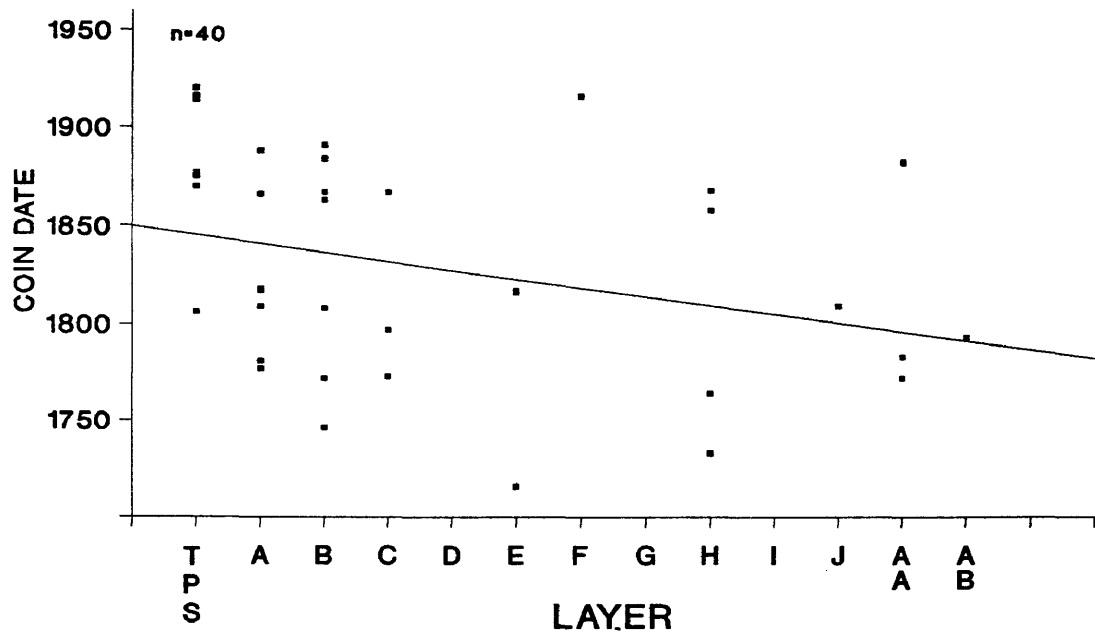


Figure 17 - Coin mint date distribution by layer depth. TPS represents topsoil, A through AB represent sequentially deeper layers. Almost horizontal line on mid-graph shows weak trend for older coins to be found in deeper layers.

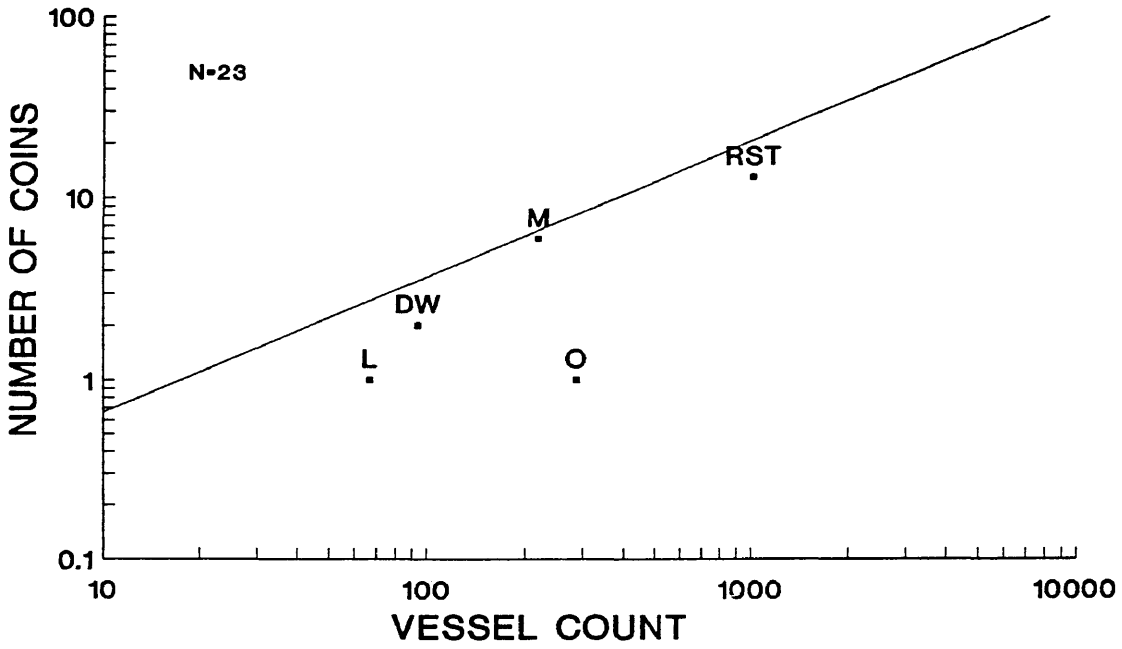


Figure 18 - Scatterplot (in log 10 scale) of number of coin finds (vertical axis) versus number of ceramic vessel finds (horizontal axis). Only sites with completed ceramic analysis are included: Dry Well (DW), Building L (Storehouse), Building M (Smokehouse/Dairy), Buildings O, R, S and T (Servants' Quarters).

## VITA

### Cynthia Ann Whitley

Born in Tacoma, Washington, January 16, 1956. The author received a B.A. in International Affairs from Sweet Briar College in 1978, spent the following eight years working in Washington, D.C. and entered the Masters Program in Anthropology at the College of William and Mary in 1987. Requirements for field training in historical archaeological methodology and technique were fulfilled on the Dutch island of St. Eustatius in the West Indies.

During the summer of 1988, the author worked for the Colonial Williamsburg Archaeological Field School, co-supervising the excavation of an early 19th century slave quarter. The fall of 1988 brought work in contract archaeology with the Archaeological Project Center in Williamsburg, Virginia, participating in the excavation of 18th and 19th century sites in the Tidewater area and the processing of recovered artifacts.

In December 1988, the author began work with the Thomas Jefferson Memorial Foundation, better known as Monticello, outside Charlottesville, Virginia. In the position of Archaeology Laboratory Supervisor, time is split between field and lab work, acting as site supervisor during the summer Monticello/University of Virginia Archaeological Field School.