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THE ILLUSTRATED MAP

Cartography and Power in Seventeenth Century Virginia

A Thesis

Presented to

The Faculty of the Department of Anthropology

The College of William and Mary in Virginia

In Partial Fulfillment

Of the Requirements for the Degree of

Master of Arts

by

Christine Jeanette Green

2000

APPROVAL SHEET

This thesis is submitted in partial fulfillment of the requirements for the degree of

Master of Arts

Christine J. Green

Approved, December 2000

Norman F. Barka

Brad Weiss

DEDICATION

To the memory of my father, Robert J. Green.

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ABSTRACT

European art contains many symbols which may indicate the artist's or culture's true attitudes toward the natural and human world. Many of the maps which were produced in early modern Europe are highly decorative and therefore also have symbolic meaning to those viewing them.

Many landscape scholars have examined early European maps and the symbolic art which adorn them. Unfortunately, few have attempted to relate their findings to the way average people of the period lived. None have attempted to ask, "Did the average person understand the world in the same way as those who created or viewed these maps did?"

The analysis of eight British maps of seventeenth century Virginia demonstrates that a struggle for power was at the forefront of the British colonial endeavor in the New World. These maps symbolically show that the British sought power over the goods, the land, and the people of Virginia. In addition, they fought to regain power over the fear they had developed of the unfamiliar landscape of the Chesapeake.

During the colonial period only a privileged few were able to purchase or understand these elaborate maps. In order to more fully understand how all of Virginia's British settlers related to their environment an investigation of current archaeological evidence was undertaken. This evidence does indeed indicate that the acquisition and maintenance of power was important to most people involved in the colonization of Virginia in the seventeenth century.

THE ILLUSTRATED MAP:
CARTOGRAPHY AND POWER IN SEVENTEENTH CENTURY VIRGINIA

Chapter I Introduction: The Landscape Process

An analysis of eight colonial (ca. 1685- 1700) English maps depicting Virginia demonstrates that the artistic illustrations adorning these maps are important and meaningful symbols of power. In this paper I show how maps fit into the wider scholarship of landscape studies and how one can search for and find meaning in maps' artistic images. Moreover, I examine how maps, specifically English maps of colonial Virginia, contain symbols of power in many forms. Finally I explore how these symbols can be placed in a productive dialogue with the material culture and archaeology of the early Chesapeake.

Landscapes: Changing Definitions

landscape: n. 1. A view or vista of scenery on the land. . . 2. A picture depicting a landscape. 3. The branch of art dealing with the representation of natural scenery. . (The American Heritage Dictionary)

When most people think of landscape they do so in terms of the above definition. Many people of a landscape as some vast picturesque "natural" scene--as something worthy of a painting or perhaps a photograph. A landscape is often considered "pristine" or untouched by humans and is frequently described as beautiful, daunting, majestic, peaceful, or some other similar adjective. It is almost always imagined as something one sees when they are on vacation or away from home, and most definitely away from a town or city. Another popular conception is that a landscape must somehow be comprised of "natural" matter. In other words, many people may consider a garden, forest or seashore a landscape, but not the New York skyline. These common

perceptions of landscape stems from the European tradition of landscape painting. This art form, which depicts "untouched" areas and "pristine" views of nature, emerged first in sixteenth century Italy in conjunction with the development of linear geometry and perspective art (Cosgrove 1984b: 52 - 54). The Renaissance saw the spread and development of landscape painting throughout Europe and the trend, in various forms, lasted well into the Victorian era (Cosgrove & Daniels 1988: 4). Soon after the rise of this artistic style, it became common to use the term landscape to refer to natural terrain that was reminiscent of landscape paintings. To Renaissance Europeans a vista was "picturesque" only to the degree that it suggested the unscarred beauty of a painting (Thomas 1983: 265; Hirsch 1995: 2). By using the term landscape in such a way, early modern Europeans began to expose the deep connection that humans had to the natural world. This connection remained unexplored by the academic community until the nineteenth century. Before that the study of landscape was left to art historians examining "the form and history of style" associated with landscape painting (Cosgrove & Daniels 1988: 4-5).

The definition of landscape began to change in the late nineteenth century when art historian John Ruskin began looking at landscape representation as complex imagery which contained deep "moral and artistic truths" about the human relationship to nature (Cosgrove & Daniels 1988: 5). Ruskin was the first to recognize and explore the connection between the natural environment and the human mind. To him, there existed in landscape painting a truth about the higher and perfect laws of nature. He felt that the best landscape painters surrendered themselves to a faith in the great laws of nature in order to skillfully present an idealized vision of the natural world (Cosgrove & Daniels 1988: 5; Ruskin 1843).

In the twentieth century, scholars of other academic disciplines began to study the

societal significance of landscape beyond the western European art genre. For example, one of the forerunners of the study of landscape in geography and anthropology was Carl Sauer. In 1925 Sauer wrote his now famous essay "The Morphology of Landscape." As a geographer, Sauer looked beyond European art and saw landscape as part of the necessary and undeniable connection between a physical environment and the culture of the peoples who lived there. For Sauer, a cultural landscape resulted from humans' manipulation of the natural environment by a culture group, and it was the goal of the geographer to understand and interpret the physical world as changed and manipulated by peoples of that culture. In other words, the geographer must understand a culture and its character in order to fully understand the cultural landscape (Sauer 1925: 325, 343).

Ruskin and Sauer were pioneers, asking those in the disciplines of art history and geography/anthropology, to look beyond a simple definition of landscape and ask questions about the human relation to the natural environment. Ruskin, Sauer, and others built a foundation from which current landscape scholars work. Two important professors of landscape geography today are Stephen Daniels and Denis Cosgrove. Cosgrove and Daniels understand landscape as a construct derived from the world of art. They envision landscape as the way people see the land and use this vision to describe, understand, exploit, change, and interact with it. (Cosgrove 1984, 1984b; Cosgrove & Daniels 1988). Because they consider vision a vehicle through which landscape is understood and manipulated by the human world, pictorial and textual representation play an important role in their work. How the human, particularly the European, worldview is linked to the natural environment through mediums such as art is vital to their perception of landscape. (Cosgrove & Daniels 1988: 1).

Essentially Cosgrove and Daniels understand landscape representations as types of landscapes themselves--constructs fashioned by humans who view the world and then translate that view into representational imagery. Yet, as anthropologist Eric Hirsch

points out, this "static" view of landscape completely denies cultural process (Hirsch 1995: 5). In other words, while discussing the importance of pictorial/textual representation, they forget that these representations (paintings, sculpture, poems, literature, etc.) are only relevant on a superficial level--they do not relate these images to everyday life (Hirsch 1995: 5, 22). Hirsch forwards a more encompassing approach that relates landscape to cultural experience through social action. He refers to the way people relate to their environment on a daily basis as the "foreground" of social life. Behind this foreground experience lies a "background" or ideal experience. This ideal background is as a set of possible outcomes to everyday interaction with the environment; the background is "the way we might be" (Hirsch 1995: 3). By striving in the foreground for ideals evoked in the background, landscape becomes a cultural process: "The point, then, is that landscape is a process in so far as men and women attempt to realize in the foreground what can only be a potentiality and for the most part in the background" (Hirsch 1995: 22-23). For example, the Giriama of East Africa connect themselves to their sacred ritual capitol of Kaya by performing animal sacrifices in their everyday homesteads. These sacrifices are similar to purification sacrifices performed in the Kaya. By completing these sacrifices at home, they momentarily bring a background potentiality into their foreground existence, and the homestead fleetingly becomes as sacred as the Kaya (Hirsch 1995: 5).

Hirsch relates this concept of background/foreground to notions of place/space. Place is the center of where we live, work, and think while space is the wider arena in which we interact with other people and interconnect our separate places. Space is like the idea of background potentiality in that it is beyond the everyday experience of most people. The sacred capital of Kaya is both physically and spiritually distant to the Giriama and is the background space in front of which they act. In contrast, place is the realm a person or group regards as familiar and immediately real. For the Giriama, place

would be the local homestead in which they live and work every day. Place/space and background/foreground are always connected and are part of a cultural process (Hirsch 1995: 5). The idea of potential outcomes shapes peoples' day to day lives--the pursuit of what is possible and desirable affects individual and group action.

An example of this method of analysis is Christopher Pinney's study of oleographs (calendar prints) in Nagda, India (1995). Many of these prints depict an idyllic background landscape where various gods recline amidst natural scenery abundant with life and fertility which contrasts "starkly with the frequent barrenness and austerity of their [everyday] surroundings" (Pinney 1995: 94). In this case a foreground (place) reality of toxic rivers, polluted streams, and a generally degraded natural environment is set in front of an ideal potentiality (space) of agricultural plenty and natural beauty. This ideal potential is at once a filtered vision of a "perfect" past, while at the same time serving as a model image of future security and prosperity--a model that can serve as a blueprint for social action (Pinney 1995: 89).

Maps as Landscape

Because Denis Cosgrove and Stephen Daniels define landscape as "a cultural image, a pictorial way of representing, structuring, or symbolizing surroundings," maps can be understood as a type of landscape (1988: 1). One common assumption about maps is that they are objective and scientific reflections of the real world. However if they are considered as forms of landscape, maps become subjective representations of the environment. Like all images of the world, maps are biased in that they are a depiction of a chosen subset of reality. Never do they solely present purely scientific or objective facts: "The map is a purposive cultural object with reasons behind its construction and values associated with its reading. To suggest otherwise is to fail to see its status as a *made* object" (Pickles 1992: 221). Like a bowl, house, book, or tool a map is a "made"

artifact which contains meaning for the people who made it and use it.

Once maps are understood as constructed cultural landscapes, than many avenues of study open up. For example, the historian can explore how maps played an essential role as instruments of control and power, or perhaps the geographer can better understand how maps affected land use and planning. But while the study of maps as landscape can provide a glimpse into the cultures and historic eras from which they came, if they are not related to everyday experience than resulting studies are guilty, as Hirsch contends, of denying cultural process. One way to study maps as part of a wider cultural process is to envision them as landscapes which exist at the intersection of reality and aspiration. As background landscapes, maps both reflect and manipulate reality, in effect "refracting" the everyday world of people on the ground (Harley 1988: 278). Thus, a map can be understood as a background potential landscape (positive or negative) while the physical environment which is formed as a result of human action can be seen as the foregrounded landscape of everyday life. This tool of analysis will guide this examination of the eight historic maps (the background/space). The maps will be juxtaposed and related to colonial settlement in Virginia (the foreground/place) in order to gain a deeper insight into the colonial process in America.

Chapter II
Meaning & Maps:
The symbolic meaning of art in cartography

Material Culture: The Search for Meaning

As depiction of landscapes, maps, like all artifacts, are "transformations" of human behavior (Hodder 1986: 2). In other words, cartographers' personal and cultural assumptions about the world shape their vision of the environment, and, in turn the maps they create. In fact, all forms of material culture are objects created in a specific time and place by individuals who transmit their values and experience into the objects they create. Thus, it becomes clear "... that it is ideas, beliefs and meanings which interpose themselves between people and things" (Hodder 1986: 3). However meaning is not only injected into an object, it is also derived *from* the object. This complex relationship between material culture, human behavior, and culture can be schematically illustrated:

behavior

material culture

individual, culture, history

(Hodder 1986: 14)

Because there is complex interplay between ideas, behavior, and material culture, important meaning lies in/beneath the production and use of the material world. An example of this relationship is illustrated by Ian Hodder's ethnohistoric study of decorative calabashes used by the Ilchamus tribe of Baringo, Kenya. These bowls are made and decorated exclusively by women for children to use as milk bowls. Hodder explains how males among the Ilchamus associate wealth with having many children and

8

cattle. Because women are primarily responsible for the care of children and the milking of cows, they play important roles as wives and mothers. But overt acknowledgment of this importance is frowned upon by men and therefore women have few outlets in which to express any independence. By making the work they do "beautiful" via the decoration of children's' milk bowls, women are able to display their unique female power through material culture. (Hodder 1986: 109-119). Through a detailed analysis of the history, culture, and individual actors, it became clear that calabashes and their decorations carried a symbolic importance beyond the simple function of "milk container." While this is only a brief summation of Hodder's complex study, it does serve to illustrate the above point: cultural meaning and material cultural are intimately linked.

The Meaning of Maps

As a form of landscape and material culture, maps also contain meaning. A few scholars, primarily geographers, have attempted to extract hidden meanings behind the use and manufacture of European maps. One of the first geographers to recognize the significance of maps beyond form and function was John Wright. Wright argued that maps were subjective—that they were, more often than not, influenced by biased human choices (1966: 33-44). He contended that maps could be inaccurate or subjective for a variety of reasons. First, mistakes could occur because of a cartographer's lack of knowledge of the land or his craft (Wright 1966: 34). Second, maps could be deliberately manipulated for purposes of propaganda by a state (Wright 1966: 10). Wright was one of the first people to recognize the human dimensions of map making, yet his discussion lacks a deeper search for meaning beyond the analysis of "true and false" or "accurate and inaccurate" (Harley 1988: 278).

Attempts to get at the deeper meaning of maps have become recently more popular. In the 1980's and 1990's geographers such as John Pickles began to develop methods and theories for analyzing meaning in maps. In a 1992 article, Pickles calls for

the inclusion of propaganda maps in the wider discussion of maps in geography and cartography. Traditional geographers usually dismiss such maps because they are misleading or distorted and therefore considered useless to the cartographic scientist (1992: 201, 226). He insists that propaganda maps, and indeed all types of maps, are vitally important to the construction of state ideologies (Pickles 1992: 201). Pickles believes that a hermeneutic approach, which "takes as its task the proper understanding of the meaning of text [and] how it is related to its own world. . .and how it is to be related to our present world," is the best way to understand maps in Western society (Pickles 1992: 224-225). While Pickles' approach is unique in the field of geography, it contains two important flaws. The first problem is that while he outlines his hermeneutic theory, he never applies it to the analysis of any particular group of maps. Secondly, he does not explore how the agendas outlined on distorted maps are played out in the everyday world.

G. N. G. Clarke examines maps and their meanings in a somewhat different light than Pickles. Clarke contends that "a map's cultural meaning is suggested through what might be called its *visual calligraphy*" (1988: 455). Visual calligraphy encompasses those parts of a map which traditional geographers and cartographers would refer to as unnecessary embellishments such as color, lettering, decorative borders, and particularly large illustrated cartouches. He believes that these ornamental aspects of a map represent meaningful images. In particular, Clarke believes that decorative eighteenth century maps of North America contain images of control:

The map as military chart, Crown publication, or administrative text, has always established itself as a signature of authority. . .and the 'decorative' aspects of this status. . .have been basic to the way such authority is invested in what purports to be an objective rendering of the land (Clarke 1988: 472).

For example, on Thomas Jeffery's 1774 map "of the Most Inhabited part of New England," a very large and elaborate cartouche embellishes the lower right hand corner.

The cartouche depicts numerous goods being unloaded from an English ship as well as a

Native American figure in a welcoming, non-threatening pose waiting on the shore (Clarke 1988: 459-460). To Clarke these images "celebrate colonization and dominion and thus visualizes an index of control and power" (1988: 460). Clarke goes on to examine several other North American maps from the eighteenth century. Yet while Clarke's points are very compelling, his work remains problematic. First, his data set is not focused: he provides survey of maps from across North America instead of focusing on any one particular region. Moreover, like Pickles, he does not relate his findings to behavior. In other words, he does not ask how imperial authority and control were established in the everyday world of the American colonist. Clarke's work is an encouraging study of meaning in maps but does take that extra step towards understanding landscape as cultural process.

Perhaps the most prominent scholar of historic maps is J. Brian Harley. Unlike many traditional geographers, Harley studied maps in order to "demystify" the cartographic process and "search for the social forces that have structured cartography" (1992: 232). Harley called for geographers to deconstruct maps and "go beyond the assessment of geometric accuracy, beyond the fixing of location, and beyond the recognition of topographical patterns and geographies" (1992: 239). He believed that any serious deconstruction had to consider every aspect of a map. For example, he argued, as Clarke did, that decorative images from cartouches, to coats of arms, to the smallest illustration of a hill or river were not merely part of "marginal exercise in aesthetics" but important symbols of ideology (Harley 1988: 297-298). Likewise, empty spaces and silences on a map were significant since they could represent deliberate or unconscious omissions on the part of cartographers or their patrons (Harley 1988: 291; 1988b: 57). Finally, Harley examined how maps and map icons were used by aristocrats and administrators as well as by scientists and artists, as tools of control (1988: 285, 295; 1988b: 59, 65; 1992: 244-245).

Harley's only significant attempt to put his deconstructionist analysis to the test

was in his 1983 article "Meaning and Ambiguity in Tudor Cartography". His central argument was that maps "were one of a number of instruments of control [used] by landlords and governments; they were spatial emblems of power in society" (Harley 1983: 22). He begins his deconstruction by utilizing art historian Erwin Panofsky's method of "iconography" (Harley 1983; Panofsky 1955). Panofsky describes iconography as "that branch of the history of art which concerns itself with the subject matter or meaning of works of art, as opposed to their form" (1955: 26). Panofsky proposed that meaning could be derived from art if it was examined in a three step fashion. The first step requires the simple recognition of "natural" subject matter. In other words, the basic identification of a series of lines drawn in a particular manner as a human being, a house, a mountain, a flower, etc. (Panofsky 1955: 28). The second step consists of exploring how various forms of "natural" subject matter combine to form recognizable themes--the "conventional" subject matter (Panofsky 1955: 28). For example, a picture of thirteen men eating a meal of bread and wine together can be recognized by many people in the Western world as a depiction of the Last Supper (Panofsky 1955: 35). Lastly, the scholar must decipher the intrinsic meaning of the conventional subject matter--he must reveal "those underlying principles which reveal the basic attitude of a nation, a period, a class, a religious or philosophical persuasion" (Panofsky 1955: 30). This third level of meaning must be established through a careful analysis of both the natural and conventional subject matter combined with a knowledge of art and other forms of meaningful media--literature, philosophy, religion, etc. (Panofsky 1955: 38-39). An example of this would be the analysis of several Renaissance paintings of the Last Supper in conjunction with the study of contemporary Christian doctrine pertaining to the rite of communion rite.

Harley matched Panofsky's three levels of meaning with similar levels in his analysis of maps. First, he considered the "natural" subject matter of a painting akin to the customary signs used by cartographers in sixteenth century England. For example, on

Tudor maps small "sugar loaves" represented hills and buildings designated towns and villages (Harley 1983: 23). The next level "involves recognizing that a particular spatial arrangement of conventional signs is intended to denote a specific place" (Harley 1983: 26). In other words, a specific conglomeration of hill signs, settlement symbols, or church icons is used to represent a specific geographic area (Harley 1983: 26). Harley translated Panofsky's third level of "intrinsic" meaning as "the ideological or symbolic undertones of images as they were understood by the cartographers, their patrons, or by individuals or groups in the society who came into contact with the image" (1983: 29). He used the example of Richard Lyne's 1574 map of Cambridge to illustrate his point. He noted that Lyne used "many decorative features" as well as flattering border notes in order to convey a "Utopian view of an ideal place which. . .was . . .of vital importance in the formulation of attitudes towards this particular English town" (Harley 1983: 30).

Despite his broad statement about the famous university city, Harley did not describe the "decorative features" contained in Lyne's map or why they were significant as symbols of a utopia. Harley only went on to briefly deconstruct a map of the city of London and there ends his study. In addition, he does not explore the wider context which Tudor maps come from--i.e. the religious, political, or economical world of sixteenth century England. Thus, his study of maps as landscape is divorced from the concept of cultural process and he does not adequately connect his research to his original thesis that maps are tools of control. Fortunately, Harley recognized these failings:

... this paper, although it aims to keep in touch with historical reality by selecting examples which appear to elucidate the concepts under discussion, is inevitably more hypothetical than empirical in nature, and some of its statements remain unsupported (1983: 22).

It seems likely that Harley was working on a larger, more complete study of English maps, but an untimely death in 1991 halted his research (Nobles 1993; Harley 1992). Yet his work has inspired many others. Gregory Nobles, a noted American historian has

followed in Harley's footsteps by approaching maps as a subject of historical inquiry in themselves rather than using them as sources of topographical information (Nobles 1993).

All of the above scholars touch on aspects of cartography important to the discussion of Virginia maps to follow. Wright, Pickles, Clarke, and Harley all recognize that maps are subjective representations of the land and that map production and use is influenced by various agendas. They contend that as biased representations of landscape, maps contain meaning for those who make and use them. But where does one begin the search for meaning? In order to derive meaning from any object a discussion of the context from which it came is essential (Panofsky 1955; Hodder 1986). At this point then it is time to explore the history of cartography and map use, every day life in early modern England, and the Chesapeake environment which early European settlers encountered.

Chapter III The Context: The Cartographic Landscape of Early Modern England

People of all cultures have unique ways of placing themselves within nature. It is these perceptions which contribute to the creation and change of natural and cultural landscapes. When the English began to map the New World they did not simply inscribe a representation of reality. The "reality" they saw was filtered through a lens of cultural perception. The natural and cultural landscape from which the English hailed was vastly different from that of America. The only possible way they could come to terms with America was to understand it in reference to what they were familiar with. Thus before investigating the human and natural environment which the Virginia settlers encountered it is important to examine the natural, human, and scientific world from which they came. This context must be established in order to understand the meanings behind the artistic symbols on colonial Virginia maps.

The Cartographic Landscape: The Science of Discovery

During the early Middle Ages, science and knowledge were being redefined in terms of Christian theology. Map making was undertaken not to document the physical world, but to illustrate God's divine earth as known in the bible. Because geography served a religious purpose, European maps were often illustrations which accompanied religious texts (Whitefield 1994: 13-14). Such illustrations were usually world maps in the form of a sphere (*orbis terrarum*) with Jerusalem located in the upper half of the circle, thus solidifying Christian authority (Thrower: 1972: 31).

The next type of map to emerge was the Portoloan chart first common in the

Mediterranean beginning in the thirteenth century. Unlike earlier *orbis terrarum* maps, Portoloan charts were used strictly for navigation. They were drawn using compass bearings taken from aboard a ship and depicted brief stretches of coastline (Buisseret 1990: 16-17).

Until the early fifteenth century relatively few innovations in map making occurred aside from the gradual development of the Portoloan chart. Then, around 1400, the lost cartographic works of Klaudios Ptolemaios were discovered (Thrower 1972: 20-21). Ptolemaios, or Ptolomy as he was commonly known, wrote *Geographia* while serving as the official Librarian of Alexandria around the year 200 A. D. Ptolomy developed the concepts of longitude and latitude and outlined a general mathematical theory for cartography. Ptolomy's book was considered a breakthrough discovery, and it soon became the basis from which Renaissance map makers worked. (Buisseret 1990: 17). One type of map influenced by Ptolomy was the hydrographic map. The hydrographic map was similar to the earlier Portoloan charts in that they were used by sailors for navigation, however, they were much more accurate because they coupled rediscovered mathematics of Ptolomy with the invention of new cartographic instruments (Thrower 1972: 68-72).

Two other types of maps that rested on the insights of Ptolomy became relatively common during the Renaissance and early modern periods--the chorographic map and the topographic map. The chorographic maps depicted large areas of land and were often commissioned by kings and statesmen who wished to "see" the territory they controlled (Buisseret 1990: 16). A pioneer of such maps in the sixteenth century was Christopher Saxton who received commissions to create maps of several counties in England (Buisseret 1990: 17). The topographic or thematic map was a chart depicting a smaller, more defined area than a chorographic map. The areas shown on these types of maps were usually of localized areas such as estates, towns, or hamlets (Buisseret 1990: 16; Thrower 1972: 174)

All maps were hand drawn until 1507 when Martin Waldseemuller used a woodcut to create the first printed map in Europe. This method was soon thought to be too crude and copper engraved plates replaced woodcuts. To add color, ladies of noble status would hand paint sixteenth and seventeenth century maps as a hobby to pass the time at home (Thrower 1972: 60). Maps from this period were rarely left undecorated, and by the end of the sixteenth century images such as large mystical sea serpents and "exotic" animals and plants are recurrent. On maps of the Americas, Native Americans were portrayed as either hideous and savage (almost like mythical creatures) or noble and handsome like classical sculpture. Many of these figures pose rustically around elaborate cartouches that ornamented many maps of the period (Lyman 1953: 50-52).

In sixteenth and seventeenth century England, maps were often "produced amidst highly charged political and cultural conditions" (Clarke 1988: 457). These charged conditions arose from the rush to acquire New World possessions and the (inevitably) territorial/jurisdictional disputes that emerged. Statesmen and powerful nobles commissioned maps which, rather than serving as simple tools of direction, functioned as legal documents that outlined land ownership and rule (Tyacke 1983: 17). As elite documents, maps were also used as tangible symbols of wealth, knowledge, and power (Harley 1988). The symbolic status of maps was reflected in the fact that they could be found in the houses of the gentry, illustrating books, stored in curiosity cabinets, or transformed into decorative tapestries to decorate the walls (Harley 1983: 39; Ristow 1972: 63). Moreover, images of maps and globes were common in gentry-owned portraits of this period and were symbolic testimonies to "the extent of the territorial powers, ambitions, and enterprises" of those depicted in the paintings (Harley 1988: 281). As documents only available to the upper classes of early modern England, maps "impinged invisibly on the daily lives of ordinary people" (Harley 1988: 285). In other words, the common people of early modern England may not have had the education or authority to use cartographic charts, but they were still subject to the consequences which

came with the "stroke of a pen across a map" (Harley 1988: 283, 285).

The European Landscape: Life in Early Modern England

In order to fully grasp how and why the English portrayed Virginia the way they did on seventeenth century maps, one must understand the world from which the colonists came. It is important to first explore how people in early modern England understood the human role in the natural world as the colonial maps which they created are based in part on this understanding. During this era humans saw themselves as being detached from the natural environment. The intellectual elite created separate spheres of art and nature. Science and exploration were tools through which one could understand the natural universe (Hirsch 1995: 6). The early moderns defined themselves as unique in relation to other living creatures. They were not a part of nature, but appointed by God to rule it. As beings created in the likeness of God, they had a right to use all plants and animals as they saw fit. Descartes and others helped establish the idea that animals in particular were so different from people that they could not have souls, feel pain, or experience any type of emotion--they were simple automata (Thomas 1985: 33). This line of reasoning paved the way to exploitation and abuse of animals. Extermination of vermin, vivisection and other scientific experiments became common. To associate one's self with animals was to consider the possibility that one had no soul. People projected their worst characteristics on to animals (Thomas 1983: 40-41). What they saw in animals included "... ferocity, gluttony, sexuality..." and what they saw in nature was disorder and savagery (Thomas 1983: 41, 194). Nature was wild and disorganized, progress was the domestication of wilderness and the construction of an ordered world (Thomas 1983: 195; Silver 1985: 188).

Even before the colonization of the Americas began, such negative views of nature helped fuel and justify people's actions toward the "other." For example, clergy debated whether women had souls. The Irish who the English sought to conquer even as

they embarked upon the colonization of America, were portrayed as bestial, ape-like, and animalistic. The poor and insane were considered equally animal-like (Thomas 1983: 61). Attitudes such as these helped to reinforce class, race, and gender discrimination (Thomas 1983: 47). These conceptions about natural hierarchy and humanity's place at the top of that hierarchy helped set the stage for the colonization and mapping of the Chesapeake.

The hierarchical system that the English found in nature could also be seen in the social structure they created. Like their convictions about the natural world, the convictions they held about social order also influenced not only colonial settlement but colonial map making. Life in early modern England was "overwhelmingly rural, agrarian, and provincial," and in 1600 approximately 85% of the English population lived in the country (Mitchell 1987: 94; Laslett 1965: 57). Of this population approximately a "twenty-fifth, at most a twentieth, of all the people alive in England. . . belonged to the gentry and to those above them in the social hierarchy" (Laslett: 1965: 27). This minority held all of the political power and most of the wealth in England. Nearly all villages or towns were dominated by the presence of landed gentry who owned much of the land worked by common laborers and tenant farmers. Their presence and status varied from place to place as Laslett points out:

Some counties had more [gentry/nobility] in proportion than others, in some they were richer, in some they were more aristocratic; but they were to be found over the whole countryside, and in the towns and cities too (1965: 66).

This rural population consisted not only of the elite gentry, but also of middling rank farmers, villagers, and tradesmen living in small hamlets and towns (Laslett 1965: 58). These villages and towns made up an intricate network of communities connected by family relations, the church, and trade. Preindustrial English society revolved primarily around the family unit or household. The household would consist of the husband/father who was master of his home as well as his wife, children, and servants.

Almost all families rich and poor had servants and apprentices living with them and incorporated into the family unit (Laslett 1965: 2-14).

At the bottom of the social hierarchy in England were the multitudes of people who were very poor. As much of one-third, and in some places as much as one-half, of the English population in the seventeenth century was considered destitutely poor (Horn 1994: 49). This group of impoverished Englishmen was growing rapidly and by the middle seventeenth century many of these people were considered "vagrants, idle and dissolute" (Horn 1994: 49).

The maintenance of this social hierarchy inspired the English settlement of Virginia and the maps that were integral to colonization. Many gentlemen of high social standing were motivated to travel to the American colonies because of the prospect of increased wealth and the increased status that accompanied military conquest and exploration (Horn 1994: 52). Also, there were some among the gentry who for one reason or another came upon difficult financial times and sought to reestablish their wealth and position by transplanting themselves in the New World (Horn 1994: 53). In fact, many free settlers in early Virginia envisioned a landscape in which the hierarchical social system of England was recreated on American soil. For example, Maryland's Lord Baltimore expected to create "a hierarchical, stratified, 'well-ordered' community of landlords and tenants. . .a structured world that evoked images of England's feudal past" (Carr et. al. 1991: 9). In order to create an English manorial system in Virginia, the gentry needed a group of people to build and maintain the foundations of such a society-the large numbers of English poor provided this base. The rapidly increasing population of poor people in England was becoming a major problem as deplorable standards of living and far-reaching hunger sparked "widespread misery as well as sporadic food and enclosure riots" (Horn 1994: 49). The need to find a solution to the growing poverty issue inspired not social or political change, but immigration to the Chesapeake in the form of indentured servitude. The ordered social and natural world that the English

understood as integral to their lives influenced not only colonial settlement but also New World cartography.

In addition to the social factors, there were also economic imperatives driving colonization. During this period of English history there was a growing demand for particular goods and resources which were difficult to obtain. European wars and growing antagonism between Spain and England were disrupting England's trade with southern Europe. Goods such as wine, olive oil, sugar, fruit, salt, and silk were all becoming increasingly difficult for the English to obtain (Quinn 1974: 289, 485). These and other sought after goods primarily came from Iberian countries and their dependencies, and the English were desperate to find a way of producing these items on their own--possibly in a colony on the Southern Atlantic coast of North America. Wood was perhaps one of the most desired resources of the time. The wild woods of old England were virtually gone by the end of the Anglo-Saxon period (~1100 AD) (Thomas 1983: 193; Gleach 1997: 65-66). The English felt that clearing forest land was a step forward as "forests had originally been synonymous with wilderness, and danger, as the word 'savage' (from silva, a wood) reminds us" (Thomas 1983: 194). But there was one fundamental problem with this line of reasoning--wood was still needed for timber and fuel. Timber-cutting was thus restricted as early as 1593 (Silver 1985: 27). Timber reserves were also created and maintained, but it was obvious this new "crop" would not last forever (Thomas 1983: 1948-199). The English needed wood and it was this essential need, as well as an ideology which justified its harvesting and use, that was brought to the New World. This need for timber and other goods deeply influenced colonial map making in seventeenth century England.

The Virginia Landscape: Perceptions of Paradise

When the English colonists arrived in the Chesapeake they encountered what they saw as a chaotic yet impressive environment. Everything in this unfamiliar Virginia

landscape from wetlands to trees, from animals to people, profoundly affected how English maps of Virginia were decorated. In order to understand what the illustrations on the maps in this sample mean, one must first understand how the English viewed the New World. These *perceptions* about the nature and people of Virginia were transformed into the illustrations that decorated early maps.

The Virginia landscape awed, bewildered and enticed the first English settlers. Fish and other edible sea life appeared more abundant and plentiful then many had ever seen. George Percy described "... a good store of Mussels and Oysters, which lay on the ground as thicke as stones: we opened some, and found in many of them Pearles" (Percy 1608 in Barbour 1969: 134). Along with shellfish there was an abundance of fresh and salt water fish such as sea bass, red drum, perch, alewives, and sea trout. Many species of bird were new to the English eye and stomach. Herons, cranes, eagles, hawks, turkey, parakeets, and quail were only a few of the bird species the settlers encountered. Mammals of diverse kinds also impressed the English newcomers. One colonist noted: "There is also a great store of Deere bothe Red and Fallow. There are Beares, Foxes, Otters, Bevers, Muskat, and wild beasts vnknowne" (Percy 1608 in Barbour 1969: 141). The Southeast teamed with wildlife hereto unknown to the average Englishman and in these animals they saw great profit (Silver 1985: 17-22).

To these newcomers the New World was not only teaming with fauna but also with flora--most importantly trees. Colonists were amazed at the sheer bounty of trees and provided list after list of the diverse kinds they encountered: "...wee saw the goodliest Woods as Beech, Oke, Cedar, Cypress, Wal-nuts, Sassafras, and Vines in great abundance, which hang in great clusters on many trees, and other Trees vnknowne..." (Percy 1608: 141). There were also tall and abundant hickories, chestnuts, and pines. (Silver 1985: 27). The English surely feared the forests for what they hid (i. e. savages and wild animals), but they also looked to them for what they could provide (building materials and fuel). In addition to timber, fruits such as persimmons and strawberries

grew in abundance. They also found new species of flowers, plants, and medicinal herbs (Silver 1985: 28). To the English, America seemed to abound with plant and animal life.

The religion, dress, physical appearance, and general lifestyle of the local Native American population both interested and frightened the English colonizers. The Native American populations whom the settlers encountered were the Powhatan people of the Coastal Plain. The Powhatans were the major Native American group in tidewater Virginia from the south side of the James river northwards to the Rappahannock. The Powhatans took the name of their paramount chief of the early seventeenth century, and the territory directly under Powhatan's control was known as Tsenacommacah. The population of the Powhatan people at the beginning of the seventeenth century ranged between 13,000 and 15,000 people (Gleach 1997: 14, 24-26). These Native Americans were variously seen by the English as obstacles to settlement, potential allies, godless heathens, blood thirsty savages, or as quaint and childish people. Men like John Smith and Thomas Hariot took meticulous notes on the life of these people.

Some settlers saw the Powhatans as a stately and noble people who were also childlike and exotic. Thomas Hariot commented that the native peoples of Virginia ". seeme very ingenious. . ." and ". . . shewe excellencie of wit" (Hariot 1588). John Smith also believed that the Native Americans were "very ingenious", but he also saw them as a naive people who were "craftie, timorous, [and] quike of apprehension" (Smith 1624: 62).

Others saw the Powhatans as a horrible and frightening people. George Percy saw them as ". . .wild and cruell Pagans. . ." who were little more than animals who "will eate their enemies. . .in barbarous fashion like Dogges" (Percy 1608: 145). William Simmonds recounted how the Native Virginians were ". . .an idle, improvident, scattered people. . ." (Simmonds 1612 in Horn 1994: 52). Thus, while the English colonists viewed themselves as people intellectually and spiritually separated from nature, they

saw the native inhabitants of Virginia as part of the natural landscape. To the English, the Native Americans were simply a part of the natural world which the colonists sought to dominate (Thomas 1983: 47).

The English came from a very complex society dominated by a minority of wealthy gentlemen who believed that the natural world was designed by God for the exclusive use of humans. This belief, compounded with a growing need and desire for commodities, brought them to the New World. When they arrived in Virginia they faced such a complex natural and human environment that they were literally overwhelmed. Immediately, the English began to describe and illustrate the natural and human landscape they encountered in order to comprehend and control it. Moreover, they often embellished their accounts to further the agenda of colonization. Some of these hegemonic images found their way onto maps, and it is to these illustrations that we now turn to in order to understand more about power and possession in seventeenth century Virginia.

Chapter IV The Background: The Illustrated Map

"Give me a map; then let me see how much
Is left for me to conquer all the world..."

from Christopher Marlowe's <u>Tamburlaine</u>

Sixteenth and seventeenth century English maps were brimming with illustrations. This was an exciting era of exploration, colonialism, and scientific discovery. These artistic embellishments, if understood in this context, take on an important symbolic function: "Far from being decorative, the 'pictoral' figuration of a map was basic to the order it imagined: the land as seen" (Clarke 1988: 457). Decor such as cartouches, animal figures, mermaids, scientific instruments, and even customary cartographic signs reflect the political and cultural mood of the era in which the map was created.

Methods & Data

This study focuses on eight maps that met a variety of criteria. First, I only wanted to look at maps from the very late sixteenth century and the seventeenth century because this was the colonial era in which issues of power and possession in the New World were first being negotiated. Second, I wished to look exclusively at English-made maps. Third, I wanted to limit my sample to maps which depict Virginia--specifically important historical locations such as Jamestown. Finally, I only selected maps for which there was accurate data about its author and origins. The three sixteenth century maps in this study are the only known English maps where authorship has been established. Robert Tindall produced the first known seventeenth century map of Virginia for Prince Henry in 1607 but it has since been lost (Verner 1980: 137). The next two are the 1608

Zuniga Chart and the 1611 Velasco or Simancas map -- both maps by unknown authors (Verner 1980 135-172). The 1608 Tindall map and the 1612 Smith map are the next known English maps of Virginia and were thus chosen for this study. After the publication of Smith's 1612 map, cartographers from around the world created at least nine different derivatives. I chose one of the English copies of the Smith map for this study, and this was the 1636 Hall map. I selected the 1651 Farrer map because it is the only known English map from the mid-seventeenth century that was not a derivative of the Smith map. Finally, I included the 1673 Herrman map of Virginia and Maryland because it was the most accurate chart of the period since the Smith map and because it served as a prototype for later maps of Virginia. The collections of the Colonial Williamsburg Foundation, the Virginia Maritime Museum, and Swem Library Special at the College of William and Mary provided the maps included in this study.

This analysis is based in part on Harley and Panofsky's approach to cartographic/artistic interpretation. First, the "natural" subject matter is considered (Harley 1983: 26; Panofsky 1955: 28). In other words, the maps' decorative elements were identified, counted and researched for known symbolic significance during the seventeenth century. These elements include trees, human figures, animals, ships, settlements, coats of arms, and mythical sea creatures. This part of my analysis is also based on methodology used by Mary Beaudry when she examined the appearance of foodways vessels in probate inventories from the colonial Chesapeake (1988: 44). She noted that each vessel was either marked or unmarked with various modifiers. For example, a bowl might have been tagged with modifiers such as "large", "small", "earthen", "broken", etc. Beaudry claims that such modifiers are "reflective of the meaning vessels had for their owners and users. . ." (Beaudry 1988: 44). I employed this same method when examining map illustrations. For example, a depiction of a human person on one of these maps may either be an illustration of a Native American or European. In this case the ethnicity is the modifier of the unmarked term "person".

Finally, I interpreted what these symbols meant to those who viewed the maps--the "intrinsic" meaning (Panofsky 1955: 38-39). In other words, I attempt to get at the "the ideological or symbolic undertones" of these images as understood by those who viewed them (Harley 1983: 29). Please refer to figures one through eight as well as the tables in appendix A for a complete illustration and description of each map in this study.

Intimate Connections: Art, Power, & Cartography

Important choices are made when an artist or cartographer creates a representation of the world. These choices are made within the context of societal values and norms as well as personal preference and taste. Thus, the illustrative art accompanying a map has a significance beyond its decorative function. The ornamental component of any map is notable in that it is intimately connected with the history and culture of the map maker and, therefore, is as much a statement about the landscape as are the more "scientific" aspects of the chart (Harley 1988: 297; Harley 1992: 239; Pickles 1992: 197). To deny the cultural weight of such art is to fail . . .

to give the map its necessary cultural status; it ignores the subtle relationship between the scientific and the decorative; it fails to see [artistic illustrations], . . . as a series of interrelated indexes which bind the map within a series of ideological assumptions as to the way the land is viewed (Clarke 1988: 455).

All of the maps in this study are decorated with artistic images. These images include depictions of trees, animals, people, and heraldry as well as more common signs indicating settlements. The images and signs on each map will be analyzed and compared in terms of the context in which they were created in order to better understand issues of power and ownership in early Virginia.

♦ Flora

The number and types of trees on the maps in this study slowly increase over

time, then drop significantly after 1650. The 1590 White-De Bry map is one of the first maps of this area to depict trees (Figure 3). Only a few are systematically scattered throughout the landscape in this sixteenth century map, but by 1612 John Smith's depiction of Virginia is virtually littered with them (Figure 5 and Figure 12). On this map, as on Hall's 1636 version and Farrer's 1651 chart, the trees are of different shapes and sizes and portray the abundance and diversity of forests in Virginia (Figures 6, 7, and 12). In contrast, the number of trees contained in Herrman's 1673 map is sharply reduced (Figure 8).

This trend was examined by counting the trees that appeared on each map and then counting each *type* of tree that appeared (Tables 1-8 and Table 9). As noted, the number of trees shown on the maps slowly increases over time until Smith's 1612 map on which 224 trees are shown. The number of tree types displayed on the maps also follows the same trend: a slow rise in the number of types, then a decline mid-century. But instead of the number of tree types peaking with the Smith map, it peaks with the Hall and Farrer maps.

While the illustrations of trees on these maps serve as decorative images or as conventional symbols denoting land mass, they also contain a deeper, "intrinsic" meaning (Panofsky 1955). As discussed earlier, the English were hungry for trees and for the products they supplied--timber, fuel, pitch, tar, medicine, etc. Tree-laden maps of Virginia set the stage for England's exploitation of timber in the New World (Thomas 1983: 193; Silver 1985: 27). On these maps the timber-starved Englishmen saw trees which they greatly desired-- this desire fueled interest in this new place and its seemingly endless supply of wood. To the colonial entrepreneur these illustrations demonstrated the potential of ownership over these, and other, precious commodities. Thus the rise in the number and tree types reflects not simply the abundance of timber in Virginia, but the scarcity of timber in England. This is an important point: the maps are more than just representations of Virginia--they are physical manifestations of a cultural landscape that

wilderness of Virginia on early colonial maps (the landscape of the exotic). By the time Herrman charted the Chesapeake region, the English were established and the process of transforming the region into a landscape of the familiar was well underway.

♦ Fauna

Trees are not the only "natural" decoration shown on early Virginia maps. On Hall's 1636 map animals are also frequently illustrated (Figure 6 and 13). On Farrer's 1651 "A mapp of Virginia," a number of animals are portrayed (Figure 7 and 13). Every animal as well as the number of different animal species on the maps were counted (Tables 1-8, Tables 10a, and Table 10b). Whether each creature was domestic or wild, economically valuable (i.e. the hides, meat, or fur was valuable) or useless as a commodity was also noted. The peak in the appearance of animals occurs between 1636 with the Hall map and 1651 with the Farrer map (Table 10a and Table 10b). Thirty animals are shown on the Hall map and twenty-five on the Farrer map (Tables 6 and Table 7). Settlers brought domestic animals to the New World, but native wildlife was the primary subject of map illustrations. Of all of the maps, Hall's map is the only one to show domestic animals and of these there are only five (Figure 6 and Figure 13). Interestingly, these five animals are pigs which lived not in fenced enclosures as they do today, but foraged in wooded areas surrounding English settlements (Bowen 1994: 161; Silver 1985: 202).

The deep meaning behind the depiction of wild animals on these maps in numbers far greater than domestic ones reflects the map makers' desire to present the New World as an enticing space (Nobles 1993: 13-15). By showing an abundance of native wildlife, colonists could be made to feel that there was more awaiting them in Virginia than simply empty land (Winer 1995: 93). These images make the chart pleasing to the eye while showing the bounty Virginia could provide colonial entrepreneurs. A trade in furs and skins could possibly bring fortune to those willing to invest the effort in hunting and

trapping. While animals on New World maps enticed those interested in monetary gain, they also served to entice those wishing to recreate the social structure of England in Virginia. For example, in seventeenth century England only Englishmen of wealth and status were permitted to hunt wild game (Thomas 1983: 22). Wild animals in Virginia could provide sport, not for the average settler, but for the English elite who wanted to replicate a feudal social structure in the New World. By the time the peak in these types of illustrations occurs, Virginia had become a Royal colony, and settlement was beginning to expand rapidly. Settlers now had more exposure to the region's wildlife so illustrations of them found their way onto the important maps of the time and animals as curiosities, food, fur, and scientific oddities, beckoned.

The many animals shown on the maps in this study reflect a confidence in the natural bounty of the New World. Yet these illustrations, like those of dense forest, also served as a warning to would-be colonists of how wild and unknown America really was. To enhance this warning, cartographers filled the emptiness on some of their maps with mythical sea creatures. The White-DeBry map of 1590 features a sea serpent frolicking in the waves next to ships and boats (Figure 3). John Farrer's map of 1651 also depicts imaginary sea creatures (Figure 7). These large and fierce looking monsters monopolize the sea. Images of frightening sea creatures occur frequently on early European maps and are derived from long standing traditions of artistic imagery (Lister 1970: 30). But these sea monsters, like the wild animal figures, also depict the otherness and exotioness of a land still largely unknown to Europeans. If one also looks at Dutchman G. Blaeu's 1648 map of Africa, similar images of wild animals and sea monsters appear (Figure 11 and Figure 14). Africa, like America, was a frontier of European expansion and its unfamiliar, exotic landscape was displayed through art and cartography (Winer 1995). Seventeenth century Europeans considered animals, both familiar and exotic, to be wholly separate from themselves. They saw them as souless, unthinking creatures.

English maps of early Virginia communicate messages of plenty versus untamed

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English maps of early Virginia communicate messages of plenty versus untamed

wilderness; messages which, in combination, convey one paramount message--control. To associate America and Africa with unusual and untamed animals was to associate the very landscape with everything that Europeans feared in the natural world and in themselves (Thomas 1983: 40-41). But at the same time, to associate the New World with the animal kingdom was to inevitably tie it to European notions of the dominance and superiority of civilized human beings. Thus the New World possessed a threatening landscape, but also one that was open to European dominance and control. Settlers could potentially rid the land of savage creatures over which they have command. They could exploit these animals to fulfill their basic needs (food and clothing), turn a profit (through trade of furs and skins), and fuel their intellectual curiosity through scientific study as all creatures were assumed to be created by God expressly for human use (Thomas 1983: 21-22). The map reader as commercial venturer saw himself harvesting these beasts, while the map viewer as faithful Christian saw himself making this new place tame and habitable.

♦ People

Maps also display pictures of people as part of the landscape. The first step in my analysis was to count the number of people drawn on each map. The next was to note if the figures were Native American or European and whether they were depicted as if in motion or in a still or posing position (Tables 1-8). These images convey important meaning to the reader because these figures are manifestations of the attitude the map makers had toward Native Americans, settlers, and explorers.

One important aspect of the human image on any map is size. Because all decorative elements of a map are part of the "... visual register in which a map's cultural meaning is suggested..." aspects such as color, types of lettering, and other adornments are extremely important to consider when deconstructing a map (Clarke 1988: 455-456). The size of an image on a cartouche or within the body of a map is part of this visual

register and can suggest a great deal about cultural attitudes toward what is represented. Take for example the 1585 *Map of Raleigh's Virginia* by John White and the 1590 White-De Bry map (Figure 1 and Figure 3). These maps show eleven and thirteen very small Native American figures in canoes. These images are comparable in size to the animal depictions on the Farrer map or the trees on the Smith map (Figures 5, 7, 12, and 13). Native Americans on the scale of flora and fauna are *like* flora and fauna. To the colonists they are more a part of the natural world than the human one.

The Native American images on the 1612 Smith map convey the same meaning in a different way. Take for example the large "Susquesahanoug" on the 1612 John Smith map (Figure 5). This image is clearly decorative and is drawn in the baroque style of classical sculpture. The image of Powhatan and his people on the upper left corner also serves a decorative purpose. Beyond serving as decoration, these large sized images demonstrate that Smith knew that Virginia was occupied by a strong Powhatan population and that these people were a force to contend with. But this large warrior is also smiling at the reader--his pose is non-threatening and welcoming. In addition, almost all of the images of Native Americans on Smith's map are in stationary poses. The images combine to communicate to the reader that while the Powhatans may be a threatening hindrance to settlement, they are also inconsequential and static--like the forest, they are a natural obstacle which can be defeated.

As time progressed and English settlements in Virginia developed, human illustrations on maps change. Compare, for example, Hall's 1636 map and Smith's 1612 map (Figure 5, 6 and 15). While Smith's map shows no European figures at all, Hall's map shows three male European figures on the middle left. Each man is apparently firing his musket toward the right of the map. Interestingly on this side of the map stand four Native American figures, three aiming bows and arrows toward the left. These images suggest conflict in the area. By 1636 the English settlers in Virginia had experienced several instances of conflict with the local population, particularly during the 1622

uprising in which over one fourth of the English settlers were killed during a surprise Powhatan attack (Wright 1981: 64). On Hall's map there are two more images of Native Americans--a house and a dance modeled after John White's earlier drawings. Powhatan's visage was replaced by three images--"a conjurer," "Their Idoll a Priest," and "their conjuration" (Figure 6). Times had changed since 1607 and Smith's welcoming yet powerful Powhatans had become more than a peculiar, strange, and mighty people. These images portray the Native American population as animalistic, exotic, lusty, and dangerous. They are no longer a natural and static obstacle. Hall has turned them into bestial and frightening figures. Thus, earlier maps equate Native Americans with a subdued, quaint version of nature and Hall's map equates Native Americans with a bestial, dangerous version of nature.

By 1673 significant Native and European conflict in the Tidewater region had dissipated. This is reflected on Herrman's map which shows only nine Native American figures in all (Figure 8). The Native Americans are all very small and are either rowing a canoe are posing very harmlessly like classic Greek sculptures. Herrman chose to illustrate only a few passive, small Native American figures who appear harmless and unintimidating. Look once again at the 1648 Blaeu map of Africa (Figure 11). Even though these images are more numerous than those on Herrman's map, they serve a similar purpose. Like Herman's very passive Native American figures, the Africans shown here are decorative yet unimposing. They surround the land but do not occupy it-they are simply curiosities.

Portraiture of cartographers and explorers also embellish many of the maps in this study and are symbols of the knowledge and power that those of status and education had over Native Americans and non-elite Europeans. Barber points out that a map's decorative features especially the ". . .coats of arms and more rarely, portraits, emphasized his [the cartographer's, commissioner's, or owners] birth, rights, and taste" (Barber 1992: 57). John Farrer's 1651 map depicts the famous explorer Sir Francis

Drake (Figure 7 and Figure 16). Looking back at the viewer, people in cartographic portraits are "discoverer-owners" (Berger 1977: 99). Herrman also stares back from his own map as owner of the knowledge which created it (Figure 8 and Figure 16). Look again at the 1611 John Speed map--he and other scholarly figures gaze at the viewer as concrete symbols of the higher education associated not just with the university at Cambridge, but with the art of cartography itself (Figure 9 and Figure 17). Map portraits of explorers, scholars, and cartographers--all very powerful people--symbolize the imperialist agenda associated with maps and mapmaking. The hierarchical symbolism of England's political agenda and colonial goals is embedded in all of the above images, and was easily understood by all who viewed the map.

♦ Coats of Arms/Regalia

Another recurring decorative symbol is that of the coat of arms. The first procedure in my analysis was to identify and count every shield on the maps (Tables 1-8). The White, White-De Bry, Herrman, Smith, and Hall maps all depict England's royal coat of arms (Figures 2, 3, 5, 6, and 8). This symbol most clearly demonstrates the intrinsic political and symbolic meaning of map imagery (Harley 1988: 298; Barber 1992: 57). With its presence, the territory portrayed in a map became property of the Crown. Not only did these emblems represent ownership of the land to other English people, but demonstrated to the world, most specifically other imperialist powers, England's New World claims. These coats of arms were "blatant stamps of possession" of the spaces depicted on maps (Clarke 1988: 457).

Other coats of arms displayed on these maps include the Raleigh arms which appears on White's ~1585 *Map of Raleigh's Virginia*" and his 1585 *La Virginia Pars* (Figure 1 and Figure 2). It also appears on the 1590 White-De Bry map (Figure 3). They, like the royal coat of arms, contained important messages for those who viewed them. Not only does the image pay homage to a great explorer, but it also serves to

demonstrate that it was not simply an Englishman who first explored this place, but an Englishman of status. On Herrman's 1673 map the Calvert arms of the Lord Baltimore of Maryland appear to tell the viewer exactly who had the power and money to fund the expedition that created this map (Figure 8). On John Smith's *Virginia* the Smith coat of arms, adorns the lower half of the chart (Figure 5). The motto accompanying this shield, which reads, "to conquer is to live" (*vincere est vivere*), most plainly and forcefully sums up England's imperialist agenda in the New World.

Occupying the Landscape: Settlements

In addition to the many decorative figures, a great number of settlements are presented on maps of early Virginia (Tables 1-8 and Table 11). The first four maps feature between fifteen and thirty settlements. But then there is a sharp peak in map five, the Smith map of 1612, which shows 167 sites. Images of settlements decreased after this but peaked again with Herrman's 1673 map which shows 115 sites. Again, identification and numeration of these sites was the first step of analysis. Only English and Native American named settlements were counted and place names and private plantations/homesteads were not included in the final count.

It was important to show settlement sites on a early map because they were important landmarks which helped those who used the chart to establish location. But, the inclusion of European sites on a colonial map also served to communicate a sense of power and control--to have the power to *name* the land was to have the power to *own* the land. One hundred and sixty-six of Smith's sites are Native American-- the only English settlement to appear is Jamestown. Thus, Smith shows English settlers slowly encroaching on a land occupied by multitudes of native people. Smith knew that the Powhatan population was a real and dominating force on the land and by showing the numerous sites that he visited and heard of he communicated this warning to the potential

colonists. But after noting the numerous Native American villages, the reader is drawn to the words "James Town" printed in much larger letters than the Native American place names surrounding it. Other English place names also appear on Smith's map, such as Point Comfort and Capes Henry and Charles, which he took the liberty of naming after the "princes of the day" (Verner 1980: 144). Colonial titles often replaced or supplanted native place names on maps for naming was critical to the colonial process--Europeans believed that naming the land was the first step towards possessing it (Winer 1995: 92; Clarke 1988: 456-457). Naming also served to create a landscape of the familiar--to replace an alien New World with one that was seemingly European. Finally, by inserting European names over native ones, colonial powers symbolically invalidated native rights to the land. So while Smith at once sent a message of caution to the reader by showing many Native American sites, he also sent a strong message of British power in Virginia via the English place names/settlement names which he so carefully highlighted on his map.

After Smith's 1612 map, the total number of settlements fell while the quantity of English sites rose so that by 1651 Farrer's map shows an equal number (seven) of Native and English sites. Between 1612 and 1651 the English foothold in Virginia became more stable, and while Native American villages did not simply disappear, the English mapmakers chose simply not to show them. This decision reflected the map makers' confidence in English dominance over the Native Americans and foreshadowed a Virginia (artistically created) without Native Americans.

On Herrman's 1673 map there is an abundance of both Native American and English sites. The map shows forty-three English settlements and ninety-two Native American locales. Why the increase in the number of Native villages shown? On a very practical level Herrman wanted to accurately depict the area as well as radiate a sense of knowledge about the region. Moreover, he reiterated the message Smith conveyed in his map earlier in the century: caution. Herrman knew that the Native Americans were still

a significant force on the scene. Yet when this map was produced, colonization was in full force and English counties, towns, and place names were abundant features. This clearly shows a strong European presence in the late seventeenth century landscape of Virginia--a presence cautious, yet ultimately unafraid, of the Native population surrounding them.

The World Unknown: Empty Space on Maps

Most of the maps in this investigation are highly decorative items with elaborate portrayals of wildlife, people, and various other motifs. A few stand out, particularly the 1608 map The Draught by Tindall, White's 1585 Map of Raleigh's Virginia, and White's 1585 La Virginia Pars. On these maps the land itself is completely empty save for a few place names (as well as some ships and sea life in White's case). At first glance, these "blank" or bare maps stand out from the others in the sample and would appear to be made only for purposes of navigation. But a closer look at the context in which these maps were made shows that they were important beyond their use as hydrographic or Portoloan maps. First, White's maps were created in conjunction with his now famous drawings of Algonquian Indians and North American plant and animal life (Hulton 1984: 34). This context highlights the importance of these maps as part of a wider pursuit of scientific knowledge. Likewise, Tindall was a highly skilled mathematician and surveyor as well as the appointed gunner for the Prince of Wales (Sanchez-Saavedra 1975: 4). These positions contributed to Tindall's status as scientist and this reputation gave his map special meaning as a symbol of knowledge. All three of these maps were considered very accurate despite being unpublished, free-hand work (Hulton 1984; Sanchez-Saavedra 1975). These maps demonstrate power through the expression of exclusive knowledge associated with cartography. These three maps have little need of decorative illustrations because,

In 'plain' scientific maps, science itself becomes the metaphor. Such maps contain a dimension of 'symbolic realism' which is no less a statement of political authority and control than a coat of arms or a portrait of a queen placed at the head of [a] . . . decorative map (Harley 1992: 241).

Therefore, an empty or nearly empty map landscape conveys a message of "pure" scientific knowledge unencumbered by unnecessary decoration or illustration.

Cartography is a way of cataloging images of the world and presenting those images to an audience (Harley 1992: 245). Only the cartographer possess the scientific knowledge needed to construct the catalogue that becomes the map, thus leaving the reader to surrender the power that comes from knowledge to the map maker (Foucault 1980: 85; Mann 1986: 23; Harley 1992: 244).

In addition, the vacant spaces on these early maps imply a vast emptiness and thus foreshadows future colonization. The European ships that appear on these maps seem to press onward toward *terra firma*—they seem determined to fill the maps' empty spaces with a European-made landscape. In other words, if the viewer sees nothing to signify occupation/possession of an area depicted in a map, then the land must be free for the taking. The owner/viewer of such a map gained abstract possession of the land it portrayed (Berger 1977: 99-109). The map and what it displays *is* the landscape as commodity. Thus the map viewer becomes the spectator-owner as he imagines possessing, developing, and exploiting these new lands. Harley visualized explorers, royalty, and merchants pouring "earnestly over *terrae incognitae* as if already grasping them before their acts of 'discovery,' conquest, and exploration have begun" (1988: 299).

The Power of the Map

The maps in this study demonstrate that anxiety was always a part of the colonial consciousness in the New World. However, they also demonstrate that a growing sense of the commercial potential of Virginia eclipsed this fear. Looking at the maps

chronologically illustrates this point. These phases of settlement will also be examined in detail in chapter 5. The years 1580 - 1600 saw the publication of the 1585 John White map, the 1585-90 White map, and the 1590 White-De Bry map. These maps depict a period before permanent European settlements were established in Virginia and during which there was extensive exploration of the New World by the major European powers. These maps contain messages of hope for future settlement, fear of the unknown, and desire for new commodities and land. The Tindall map of 1608 and the Smith map of 1612 represent a second phase (roughly 1600-1622) during which colonization and settlement were becoming realities. These two maps still betray a sense of caution but, they also convey a sense of the wonders Virginia had to offer and English explorers' increased desire to possess/exploit its resources. The next era (about 1620-1670) is represented by the Hall map of 1636 and the Farrer map of 1651. These maps show a real fear of the Native American population but also a growing hope for the further expansion of settlement. The 1673 Herrman map represents the last phase of seventeenth century settlement (about 1670-1700). It reflects confidence in the colony and an expectation of expansion. Again, the two major themes which emerge out of the analysis of these maps is the desire to exploit the resources of Virginia and fear of this seemingly unordered and volatile world.

Both fear and desire are important components of Britain's pursuit of power in the New World. For example, by embellishing their charts with trees and animals the English are saying, "we want to own this land." By leaving some spaces blank they call for colonization and announce, "we will own this land." By displaying portraits of Europeans and coats of arms they say, "we do own this land." But by illustrating fear and awe of the Virginia landscape through exaggerated and exotic pictures of Native Americans, wild animals, mythical sea creatures, and untamed forest, colonial map makers surrendered potential power to the land and native inhabitants they wished to conquer. In this way the power play involved with these maps is complicated and at

times contradictory.

These complicated messages are directly connected to how power works in society. In Western culture power is not only present in a situation where one group or person totally dominates another (Foucault 1987: 98; Mann 1986: 1; Paynter & McGuire 1991: 5). In fact, power is embodied in a web of relationships in which it is transferred, struggled for, and shared between all members of a society:

Power is employed and exercised through a net-like organization. And not only do individuals circulate between its threads; they are always in the position of simultaneously undergoing and exercising this power. They are not only its inert or consenting target; they are always also the elements of its articulation. (Foucault 1980: 98).

In other words, power does not lie solely in the hands of one group or individual--it is not a relationship between the powerful and the powerless. Instead, power is contested and negotiated all the time thereby blurring the lines of domination. In this way even a strong or dominating group or individual surrenders power to that which is feared and or dominated, and thus those in a seemingly week position gain a modicum of control.

As documents created during an exciting period of danger and discovery, colonial maps cannot escape from being mediums of power. As artistic images they carry deep meaning about the agendas, expectations, and anxieties that the English brought to the process of colonization. As scientific tools maps were symbols of status and knowledge in a world in which very few people had either the wealth or education to use or understand them. Maps are potential (positive and negative) landscapes of power. But what of the foregrounded reality of life in seventeenth century Virginia? Were these potentialities of power realized in the every-day experiences of the colonists? Because the background space of maps are *refractions* rather than reflections of real life, it is necessary to look at actual conditions on the ground through a detailed study of the architecture, settlement patterns, and the changing environment of the seventeenth century.

Figure 1

Map of Raleigh's Virginia by John White, c. 1585 (from Hulton 1984: 86).



Figure 2

La Virginia Pars by John White, 1585 (from Ehrenberg & Schwartz 1980: 75).

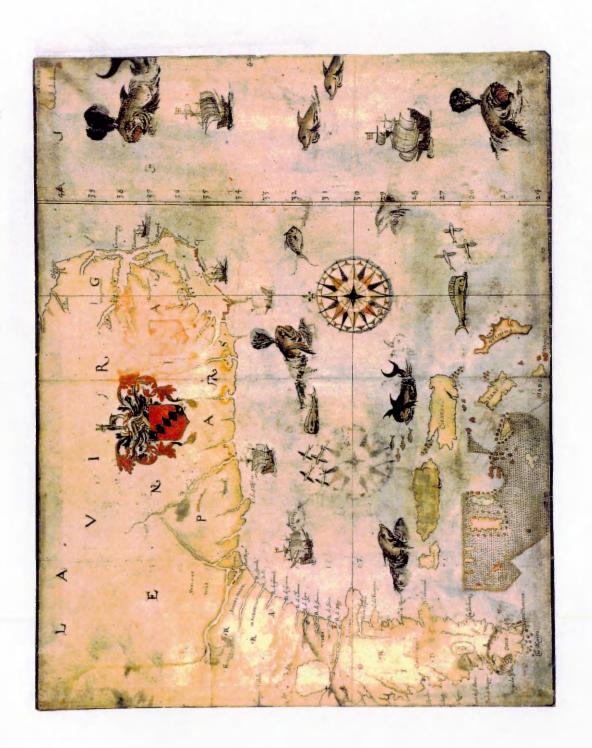


Figure 3

America Pars, Nunc Virginia by John White and Theodore DeBry, 1590 (from Lunny 1961: 18).



Figure 4

The Draughte by Robarte Tindall of Virginia by Robert Tindall, 1608 (from Ehrenberg & Schwartz 1980: 94).

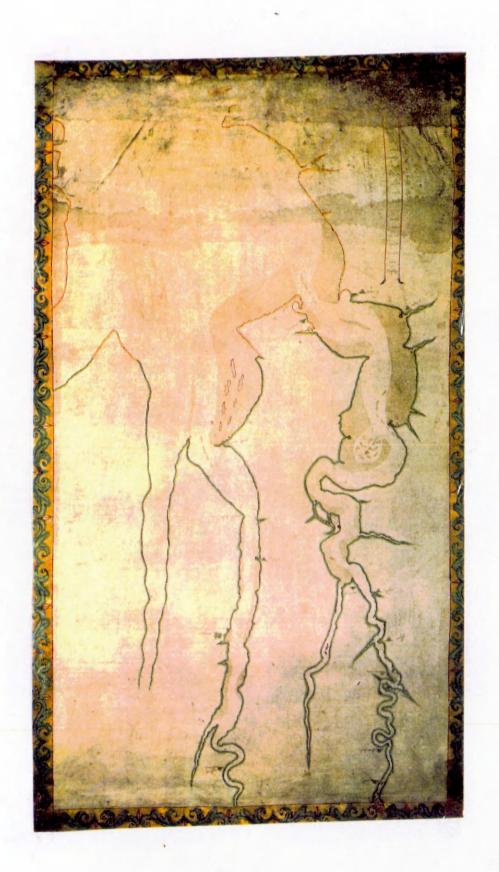


Figure 5

Virginia by John Smith, 1612 (from Bricker & Tooley 1968: 233).



Figure 6

Virginia by Ralph Hall, 1636 (from Verner 1968: 35).

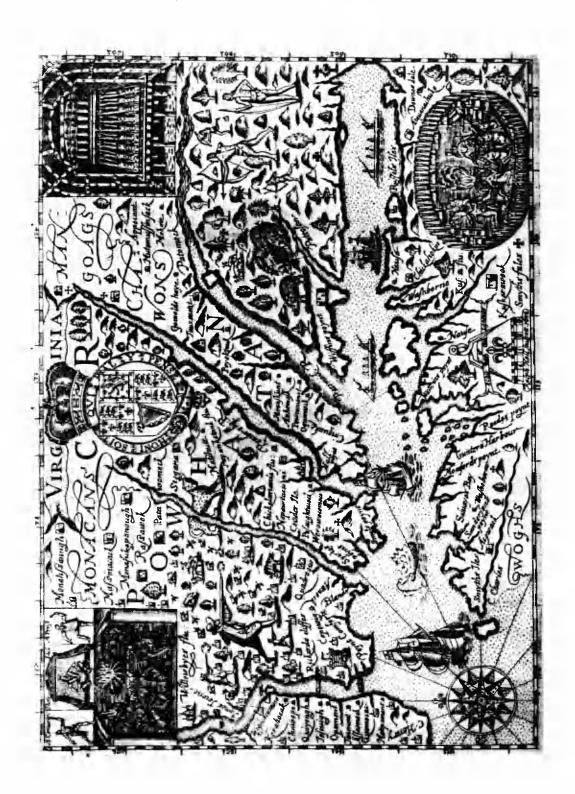


Figure 7

A mapp of Virginia by John Farrer, 1651 (from Ehrenberg & Schwartz 1980: 75).

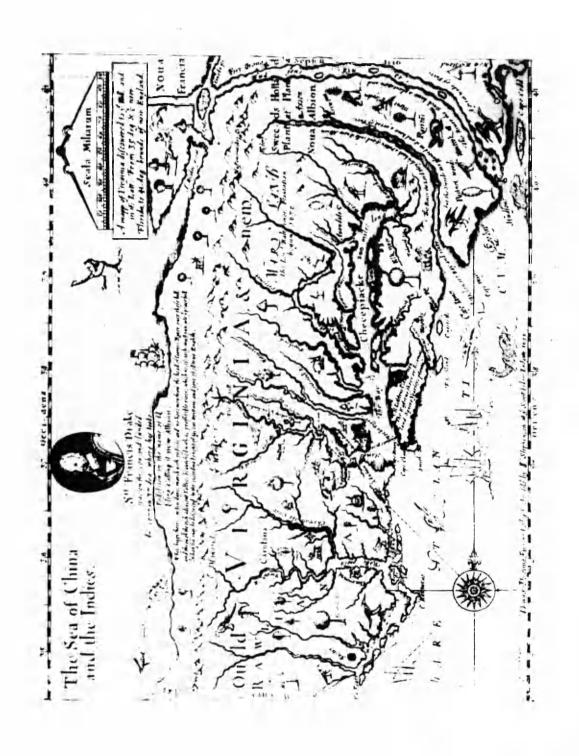


Figure 8

Virginia and Maryland by Augustin Herrman, 1673 (from Ehrenberg & Schwartz 1980: 122).

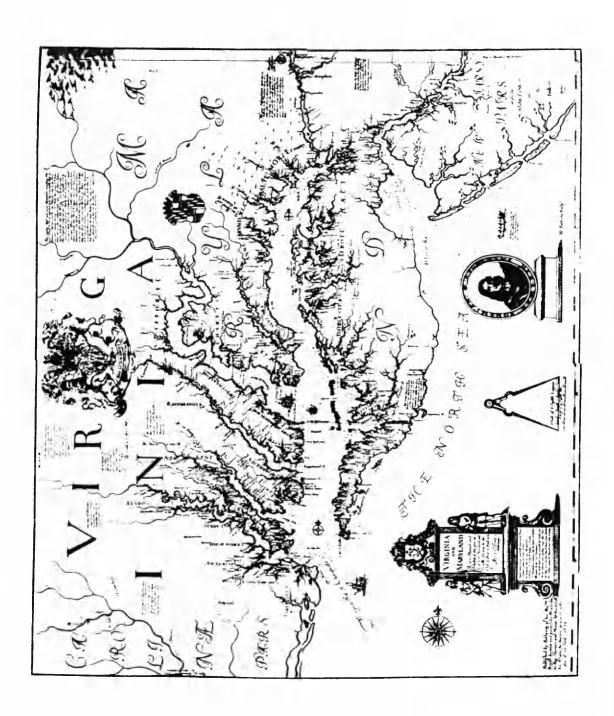


Figure 9

Cambridge by John Speed, 1611 (from Tooley 1949: plate 47).

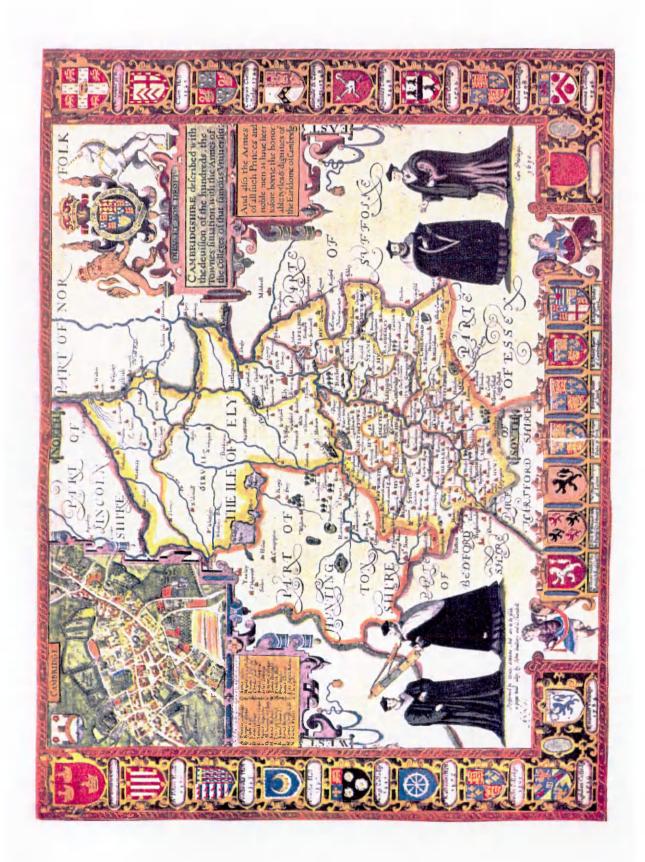


Figure 10

Cheshire by Richard Blome, 1693 (from Tooley 1949: plate 39).

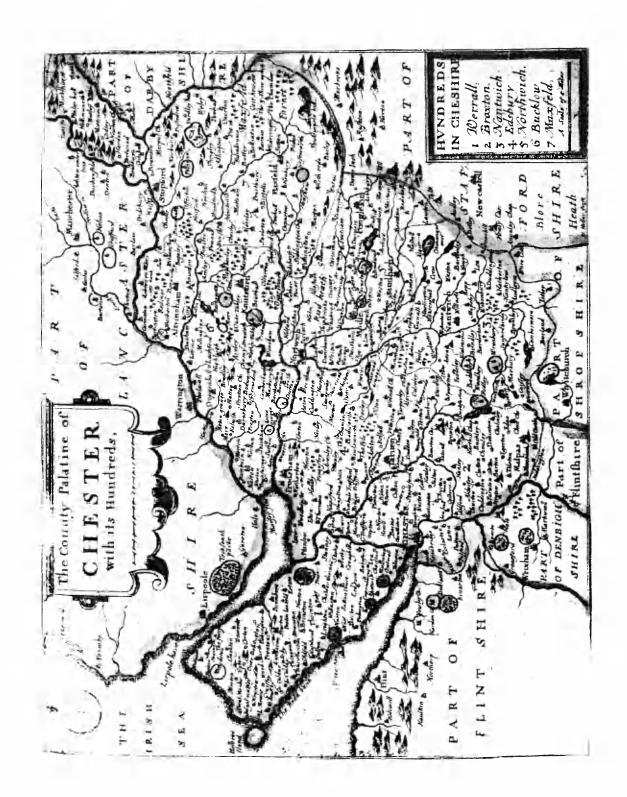


Figure 11

Africa by G. Blaeu, 1648 (From Lister 1970: plate 12).

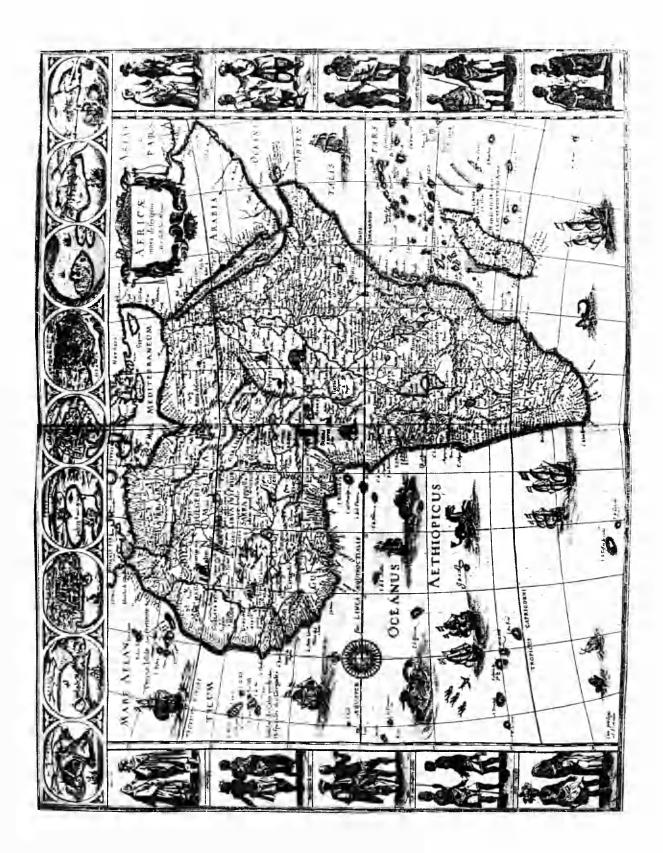


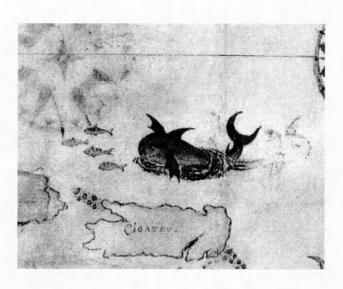
Figure 12





Tree varieties on maps by John Smith and Ralph Hall. (from Bricker & Tooley 1968: 233).

Figure 13





Animals shown on maps by John White, John Farrer, and Ralph Hall (from Ehrenberg & Schwartz 1980: 75; Verner 1968: 35; and The John Carter Brown Library at Brown University).

Figure 14



Figure 15





Figure 16





Portrait of Sir Francis Drake from John Farrer's 1651 map and portrait of Augustin Herrman from his 1673 map (The John Carter Brown Library at Brown University).

Figure 17



Chapter V The Foreground: Power and Settlement in the New World

Colonialism in Virginia

The maps in this study are filled with subtle and overt messages of power. But are these complicated cartographic themes of fear and control (i.e. power) also seen on the ground? In other words, did settlers impose themselves on the "real" landscape of Virginia in the same way in which cartographers imposed themselves on the paper landscape of the map? Was settlement in Virginia involved in the same complex negotiations of power as seen on maps? Most important, what was the relationship between the colonial expectations expressed in maps and the colonial realities of early Virginia? In order to interpret and understand the landscape of Virginia as cultural process it is necessary to investigate the process of European settlement between 1580 and 1700.

As discussed in the previous chapter, early maps of Virginia relay messages of fear and desire. These duel themes work together to create images of a world in which the English have ultimate control over the land and its resources. These same two themes are also manifest in the archaeological evidence which is examined below.

♦ Early Efforts 1580-1600

The first English venture to the Chesapeake was in 1585 when Sir Walter Raleigh sponsored an expedition that established a settlement at Roanoake which is located on the

Outer Banks of North Carolina. The settlement failed and its fort was abandoned almost a year later (Shackel & Little 1994: 1-15). J. C. Harrington uncovered the remains of this initial fort in the 1940s. He found that it was located 500 feet inland and was shaped like a star with bastion-like corners. No dwellings were uncovered except a possible building within one rounded bastion. Little cultural material was discovered (Harrington 1949: 135-139).

In 1587 a second expedition was sponsored by Queen Elizabeth, Raleigh, and John White. This time 150 people, mostly families, sailed for Virginia. White left the struggling colony to obtain more supplies and provisions from England. When White returned in 1590 he found that the English inhabitants of the colony had dispersed. Archaeologists have failed to find the remains of this village, but Harrington suspects that it was situated west of the existing fort (Harrington 1949).

These early experiences in the New World directly affected the cartographic images that map makers created. Between the failure of the first Roanoke settlement and the second one, Thomas Hariot published A Brief and True Report of the New Found Land of Virginia. Hariot did exactly what the map makers were doing--except he used text. This book combined Hariot's careful observations of Native Americans and the local fauna and flora with John White's now famous drawings. Hariot described the local environment and detailed the resources that might have been useful to the English, particularly the timber which could be found in abundance (Hulton 1984).

Colonists, like map makers, were not only attracted by the land but repelled/afraid of it. Colonists expressed their fear of Spanish raids and of the unknown dangers of the New World by erecting a fort at Roanoke. They exhibited their curiosity and desire to exploit the land by producing scientific works describing the local people, animals, and plants. Because of the failure at Roanoke, real attempts to utilizing Virginia's natural resources, specifically trees as shown on the White-De Bry map, was not realized.

♦ A Second Attempt 1600-1622

The "lost colony" of Roanoke did not completely discourage adventurers from coming to Virginia. In 1607 John Smith and about 105 other people established Jamestown and erected a fort. They chose the easily defended location of James Town island on the James River. William Kelso and the Association for the Preservation for Virginia Antiquities discovered the remains of this structure in the 1990s. The fort was constructed in the shape of a triangle with bastions at each corner. The fort consisted of a substantial palisade surrounded by a large dry moat (Kelso 1997: 23-38). The James fort was supported by a fort at Point Comfort and by the 1609 Smith's Fort. Only a portion of Smith's Fort has been excavated and appears to be part of a linear earthwork over looking a high bluff (Turner & Opperman 1993: 81). This fort was abandoned by 1610.

Settlement in early Virginia was about more than just erecting forts--it was about reaping profits from the land. It was during this early period of settlement that John Rolfe and others experimented with the cultivation of tobacco. In 1614 Rolfe shipped four hogsheads of the leaf to a London merchant and tobacco quickly gained popularity in England (Billings 1975: 175). Virginia proved to be the ideal environment for tobacco agriculture and people soon learned that a great profit could be made off of the weed. Immigration to Virginia soared and between 1607 and 1625 approximately 6,000 people arrived in the colony (Billings 1975: 105).

English colonists established settlements all along the James River.

Archaeologically dwellings which relate to this period of settlement have been located at Governor's Land, Flowerdew Hundred, and Martin's Hundred. At the Maine in Governor's Land a puncheon home was uncovered; the artifacts associated with the site indicates that it was occupied by a family who gained a certain degree of wealth during the early Chesapeake's tobacco boom ca. 1618 - 1625 (Outlaw 1990: 79). George Yeardly arrived at Flowerdew Hundred in 1618 and soon began erecting a sizable settlement. Sometime between 1618 and the 1620s Flowerdew's settlers erected a

substantial compound on the James River. It had a bulwark or bastion on the southeast corner, a flanker on the southwest, and two strong walls. (Hodges 1993: 188-190). Two buildings, a well, and a hearth have been located within the compound along with many military artifacts such as a breast plate and cannon (Deetz 1993: 31-34, 45; Hodges 1993: 190). Flowerdew's inhabitants built at least seven other dwellings during this period (Deetz 1993: 45). The English "Society of Martin's Hundred" funded the establishment of a small village called Wolstenholme Town on the banks of the James River in 1619 (Hatch 1957: 104). Its settlers erected a trapezoidal palisade fort with a watchtower in one corner which was excavated by Colonial Williamsburg in the 1970s and 1980s (Hume 1991: 218). The excavations also revealed a company compound, a large barn, and a small dwelling (Muraca 1993: 23). At one site (H), archaeologists discovered a dwelling that was enclosed by a fence or palisade and two flankers. It is likely that there was at least one cannon located in this area (Muraca 1993: 39, 47).

The establishment of housing and protection was the first step to creating a landscape in which the English settlers felt safe and secure in their new homes. But, establishing themselves also meant creating a home away from home--a "New England." For instance, while tobacco was by far the most profitable enterprise in Virginia colonists made some efforts to develop other industries in order to produce some of the goods they would need to improve life in Virginia. At Martin's Hundred archaeology has revealed that settlers turned their hands toward ceramic and tobacco pipe production, gun repair, and lead shot manufacturing (Muraca 1993: 44). At Falling Creek six miles south of present-day Richmond, an iron works operating between 1619 and 1622 produced cast and wrought iron products (MacCord 1964; Hatch & Gregory 1962). John Cotter and others have found remains of the 1608 and 1621 glass works at Jamestown as well as signs of local pottery production (Cotter 1958: 105). There is also evidence of brick and tile manufacturing at Jamestown in the very early part of the seventeenth century as well as possible iron working (Cotter 1958: 165). Settlers also began harvesting Virginia's

vast forests. The very first ship to leave the new colony for England was loaded with pine, oak, and other timber (Silver 1985: 150). Yet the emphasis on timber, and its exploitation, exhibited on Smith's map as well the White-De Bry map of the previous era, was never fully realized on the ground. Tree harvesting for profit failed for several reasons. First, the shipment of whole logs across the Atlantic to England was very costly due to the heavy weight of the wood. Also, this type of cargo "took up space that could be devoted to other high-profit items such as tobacco and furs" (Silver 1985: 150). Finally, the timber industry never "measured up to English expectations" because the loblolly pines that were abundant in Virginia did not produced the high-quality pitch and turpentine that the English also desired (Silver 1985: 159).

As discussed in the previous chapter, the colonists feared and despised untamed nature and especially the unfamiliar wilderness of Virginia. Unfortunately, this fear and disdain was not enough adequate preparation for the difficult times which accompanied early settlement. For example, during the "starving time" of the 1609-1610 winter European rats and mice brought on English ships spoiled much of the settlers' store of food (Crosby 1991: 191). This winter was particularly cold with low precipitation fostering the growth of serious infectious diseases (Earle 1979: 109-110). The hardships didn't end after winter. In 1608 George Percy wrote:

Our men were destroyed with cruell diseases as Swellings, Fixes, Burning Fevers, and by warres, and some departed suddenly, but for the most part they died of mere famine. There were never Englishmen left in a forreign Countrey in such miserie as we were in this new discovered Virginia.

Typhoid, dysentery, malaria and salt poisoning took many lives and only thirty-eight of the original 105 settlers were still alive in January of 1608 (Earle 1979: 99, 113). Summer proved to be the worst season for diseases because as discharge from the river fell, water levels receded leaving pools of standing water. These stagnant pools were ideal breeding grounds for typhoid and dysentery (Earle 1979: 102). Yet disease and famine were not the only things the new colonists had to contend with. Native

Americans occupying the coastal plain did not simply sit by as their homeland was occupied by a foreign people.

♦ The Colony Endures 1622 - 1670

In 1622 the Powhatan people attempted to retake the land that the English had claimed as their own. On March 22, 1622 the Powhatans simultaneously attacked English colonists all over the James River basin. They destroyed homes, slaughtered cattle, and killed 347 settlers. Colonists abandoned several settlements, including the Maine and Wolstenholme Town (Outlaw 1990: 79; Hume 1991; Muraca 1993). Flowerdew suffered few casualties, possibly due to its strong defenses (Deetz 1993). The fortified compound at Flowerdew endured and probably soon after the attack its settlers constructed a new redoubt at site 64. This redoubt was rectangular in shape and was double walled since it housed the settlement's powder magazine (Hodges 1993; 195-196).

The attack solidified the fear which the colonists had of the local Native Americans, and this fear pushed the colonists towards various defensive actions. For example, settlers at the Littletown and Kingsmill tenements, which were erected in the 1620s, settlers huddled close together for mutual support while remaining far enough from the river shore to remain undetected by enemies approaching by ship (Kelso 1984: 198). The people who chose to remain in the Martin's Hundred area gathered around the stream at Grice's Run for protection. Archaeological evidence of military equipment and personal arms at sites 11 and 2 reflect the colonists heightened sense of security (Muraca 1993: 67-69, 77). Likewise, Surry settlers clung together along the banks of the James River (Kelly 1979: 195). The colonists at the Harborview settlement supplemented their settlement after the attack by joining two structures with a ditch-set stockade thus making the two buildings into ad-hoc bastions. By 1646 its inhabitants had constructed a more substantial bawn, or fort, with opposing circular bastions (Hodges 1993: 200-201). As early as 1624 fearful colonists voted to erect a palisade across the James-York peninsula,

yet the project did not come to fruition until 1634. Portions of this structure have been found archaeologically (Morgan 1975: 136; Hodges 1993: 198; Deetz 1993: 49-50; Blanton et. al. 1997: 52).

Despite the Native American uprising of 1622 and the eventual dissolution of the Virginia Company in 1624, the English pushed on with their efforts to firmly establish themselves in the Virginia landscape. The population of Virginia continued to increase and more settlements appeared along the York and James rivers (Billings 1975: 40, 105). Some colonists not only built homes of wood and daub, but also homes of brick and stone. Flowerdew Hundred's new owner, Abraham Piercy, built a substantial structure of stone and brick. Piercy's home rested on a siltstone foundation, was two stories high, had a red tile roof, a brick chimney, and was decorated with carved bricks (Deetz 1993: 35-38). The 1630s site A at Martin's Hundred most likely had a brick chimney, windows, and was adorned with Dutch delft tiles (Muraca 1993). In the early 1640s Richard Kemp, Secretary of the Colony, built a remarkable lobby entrance hall and parlor house at his Richneck Plantation: the dwelling was two stories high and constructed entirely of brick. In addition, the plantation contained a separate kitchen or servants quarter also made of brick (Muraca 1998). These elaborate and expensive homes allowed their wealthy owners to feel established in Virginia; they could live comfortably and feel that they had successfully constructed a little piece of England in the Tidewater.

In 1644 the Powhatans launched another attack against the English and killed nearly 500 people (Billings 1975: 209). However, even in the face of these losses, the colonists did not loose heart. Instead, the English quickly suppressed the uprising and continued to expand the settlement and build substantial homes. For example, at Greensprings, Governor William Berkeley built a home in the late 1640s that stood on a brick and sandstone foundation and contained two brick cellars as well as brick fireplaces (Markell 1994: 55). During the 1650s a Flowerdew inhabitant built a dwelling with a tiled cellar (it was probably erected on ground sills) at site 77 (Deetz 1993: 63-66). In

the 1660s another colonist constructed a large cellar for his brick dwelling at site 92 (Deetz 1993: 62-64). Col. Thomas Pettus of Kingsmill built the "Littletown Manor" in the latter part of century--by 1700 the dwelling sported a brick chimney, a brick and tile cellar, and several substantial outbuildings (Kelso 1984: 199; Markell 1994). In the 1660s a very wealthy John Page built a brick house which was at least one and a half stories high, had carved and molded brick, and casement windows. An all brick dependency with casement windows and a tiled roof supported this substantial dwelling (Metz 1998: 1-3). By 1665 Thomas Ludwell had gained possession of Richneck, added three new supporting structures, removed the central chimney from the main house, and added two brand new end ones. He also added decorative earthen pan tiles to the roof, a wooden floor, and supplemented the kitchen/quarter with two new wings and two cellars replete with glazed tile floors (Muraca 1998). Likewise, in 1665 Arthur Allen erected the still standing brick home known as Bacon's Castle (Andrew 1984). By that same year there were probably sixteen to eighteen brick homes in Jamestown (Harrington 1950).

Successful colonists were prosperous because of the infamous tobacco plant. But in order to create a landscape which was familiar and English the colonists also continued to experiment with other small industrial activities. Locally made pottery dated to this period has been found at several sites including the Pasheby tenement at Governor's Land, Jamestown, Martin's Hundred sites 2 and 11, and at Flowerdew's site 92 (Outlaw 1990: 79; Cotter 1958: 105; Muraca 1993: 67-69; Markell 1994: 58). Archaeologists at Martin's Hundred found pottery wasters at site B and it is possible that a kiln existed at this site (Muraca 1993: 62-63). Likewise, by the 1660s a pottery kiln operated on Governor Berkeley's property at Greensprings (Markell 1994: 58). It is also likely that colonists devoted more time to tobacco pipe production as excavators found wasters and trimmings from pipe production sites at Flowerdew Hundred (sites 77 and 92), Nominy Plantation, Governor's Land, and Jamestown (Markell 1994: 59; Outlaw 1990: 79). Virginia colonists also produced increasing amounts of bricks and tiles. John

Page had a brick kiln in operation on his property; similarly, there was an underground brick kiln found at the Richneck Plantation site (Metz 1998: 1-3; Muraca 1998). Archaeologists also uncovered a brick kiln at Jamestown (Harrington 1950). The Powhatans destroyed the Falling Creek Ironworks in 1622, but iron manufacturing continued at Flowerdew's site 92 where excavators unearthed shallow pits filled with baked clay, iron, slag, brick, and charcoal. These pits are likely evidence of a bloomerytype manufacturing (Deetz 1993: 66-67; Markell 1994: 56-57). Smelting also likely occurred at the Drummond site as iron, clay, slag, cinder, iron ore, and charcoal were unearthed there as well (Markell 1994: 58). Colonists also developed an interest in hunting and trapping the region's various animals. Colonists, or Native Americans who wanted to trade with them, hunted deer for meat and their skins as well as bears and beavers for their fur and hides. By mid-century the fur trade was particularly successful along the fall line of the James river as well as in areas south and west of Jamestown because the Native Americans in these areas were less affected by disease and other contact and were therefore more willing to participate in the trade (Silver 1985: 113). In fact, by 1644 several forts were erected in these areas in order to encourage and protect English fur and skin traders (Silver 1985: 113). The fur trade, and in particular the deerskin trade, proved very profitable and by 1670 casks of furs and skins were beings shipped to England along with tobacco (Silver 1985: 114). As projected on the maps of this period, colonists were able to exert some control over the wilderness around them by hunting and trapping. At the same time they were able to fulfill a commercial demand for skins and furs.

The map makers who created early maps of Virginia displayed images of caution and fear on their maps. But fear became more than just an image to the Tidewater settlers--the attacks they suffered and the hardships they faced were real. This fear prompted the construction and maintenance of strong defenses at Martin's Hundred, Flowerdew Hundred, Kingsmill, and at Harborview as well as all over the colony. But

despite this renewed caution, the English population of Virginia continued to increase. When Englishmen looked at maps of Virginia they not only saw images of fear but of hope as well. They envisioned the creation of a "New England" in the Chesapeake and came to Virginia in droves in order to establish themselves upon the land. Many created manor-like homes of brick and mortar. They also established hunting not only as sport but as a commercial venture. The wealth and control which the English desired was also expressed through small industries. Although tobacco was by far the most profitable pursuit in the Chesapeake, the English sought to permanently establish themselves on the land by experimenting with tobacco pipe production, brick making, and iron smelting, for example. While these small ventures were by no means bringing in large profits, they were important to the colonist trying to establish a purely English way of life in Virginia.

♦ A New Generation 1670 - 1700

As seen in the preceding pages, the English left their mark upon the Virginia landscape. Despite opposition from the local Native Americans, the English continued to pursue their goals of wealth. By the late seventeenth century wealth meant status and architecture was an important way in which to display this status. For instance, most of the substantial homes constructed between 1620 and 1670 continued to be occupied during the later part of the century including the Page house, Richneck, Bacon's Castle, Greensprings, and the "Littletown Manor" at Kingsmill. There is also substantial archaeological evidence to suggest that colonists erected and occupied complex homesteads during this period at Martin's Hundred site J and 10 and at Thomas Pope's home at the Clifts plantation (Muraca 1993: 90; Neiman 1978 & 1998). By the last quarter of the seventeenth century Jamestown was a substantial town containing brick row houses, dwellings, and public buildings fitted with casement windows, decorative plaster, and pan tiled roofs (Bragdon et al 1993: 229-235).

Despite initially prosperous conditions during this period the tobacco boom came

to a halt. Tobacco prices fell due to over production and the enforcement of the Navigation Acts which hindered shipments of goods to countries other than England (Billings 1975: 77-78). But, as seen above, this depression did not completely discourage Virginia tobacco planters who continued to expand and develop their holdings. By now many English colonists were native born Virginians or had lived in the colony for quite a long time. A much smaller, but still significant portion of the population had become rich. These wealthy planters had the resources and capital to ride out the tobacco depression--some became successful land speculators or bought cheap land to expand their properties (Muraca 1993: 85; Morgan 1975). These same elite planters also took advantage of a new type of labor force that was being introduced to the Chesapeake: African slaves. Planters turned to slave labor because of a shrinking supply of white indentured servants; better economic conditions in England reduced the flow these servants (Kulikoff 1986: 37). Tobacco was very labor intensive and its profits provided capital for the acquisition of slaves. Wealthy planters purchased African slaves, first from the West Indies and then directly from Africa, to replace their white servants. Between 1674 and 1695 almost 3, 000 Africans were enslaved in Virginia and this number doubled between 1695 and 1700 (Kulikoff 1986: 40).

By owning human beings as slaves, English colonists had a form of control that they never had before. This control was made apparent through the architectural trends which began to arise in conjunction with slavery. For example, at about this same time, supporting outbuildings appear at Richneck and at the Page home. Outbuildings and servants quarters appeared on wealthy plantations at the Utopia cottage at Kingsmill, structures 2 and 3 at the Clifts Plantation, and in Jamestown at structures 1/2 and 3 (May 1998; Kelso 1984; Neiman 1998; Bragdon et. al. 1993). Neiman contends that this trend directly correlates with the introduction of slavery in Virginia. He notes that as more and more slaves were forced into labor in Virginia their owners sought to physically separate themselves from this new and alien labor force by building work spaces and

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hard to display on the ground as well.

Powerful Trends

This examination of the process and impact of English colonization in Virginia demonstrates that complex power struggles were a part of the everyday landscape. For example, when colonists arrived in Virginia the first thing that many of them did was to erect large and elaborate fortified structures as seen at Jamestown. On one level, fencing of any type marks property lines and "to define property is thus to represent boundaries between people. . ." (Cronon 1983: 58). In the minds of colonists these boundaries were clear symbols of ownership and power which served not only to protect from attack but to legitimize their seizure and control of the land (Winer 1995: 82). However, fortifications were also admissions of fear. The boundaries colonists created also gave power to the local Native Americans by demonstrating their fear of native people. As time went on and tensions heightened (especially after the 1622 Powhatan uprising), their fear grew. However, so did their determination to lay claim to the land as demonstrated by the construction of the 1624 trans-peninsula palisade and other local defensive compounds. After the suppression of the 1644 uprising, their fear slackened, English confidence in their power over the land and the native people solidified, and the number of defensive structures declined.

Power was also expressed in other ways. For example, despite any apprehensions the colonists may have lived with they never the less rapidly established themselves on the landscape. After initial experiments with tobacco, the demand for the weed soared. The colonist quickly set tobacco plantations all over the Chesapeake and its production and sale brought large profits to many colonists. Throughout the seventeenth century, tobacco agriculture was the dominant industry in the entire Virginia colony. However, not all English settlers became full time planters: some engaged in craft production and manufacturing. Tradesmen appeared early on the colony's history and their efforts only

increased over time. Modest attempts at small industries such as glass making lead to more lasting efforts such as ceramic manufacturing. On one level, colonists engaged in manufacturing to ensure their survival and establish an English way of life in the region. But as Markell points out, "manufacturing had become a statement of independence from England" (1994: 60). The English government frowned upon major manufacturing efforts in the Virginia colony. The general belief in England was that colonies existed only to serve and be subordinate to the motherland (Markell 1994: 59). Colonists asserted their independence by challenging these notions and continuing with their industrial efforts—no matter how small or unprofitable the attempts might prove. Power is always a two way street where an individual or group A has power *over* an individual or group B, and B may or may not comply with that power "making power exercise the result of the interplay of domination and resistance" (Paynter & McGuire 1991: 5). In this case A (England) was resisted by B (Virginia colonists) thereby shifting the existing base of power.

Another dynamic of power in the colonies was the rise of grand homes and substantial public buildings. Architecture in Virginia began modestly with puncheon walled homes as seen at Governor's Land but rapidly progressed so that by 1670 homes like those of Page and Ludwell and the brick buildings of Jamestown dotted the landscape. Power is demonstrated though large and ornate buildings: such structures proclaimed the wealth and power of their owners, be they wealthy planters or the provincial government (Paynter & McGuire 1991: 7). In addition, these elaborate structures served to create a very "English" lifestyle in a sometimes inhospitable and decidedly "un-English" environment. But these high profile buildings also created boundaries between people. They established a highly visible boundary between wealthy planters and yeoman farmers who dwelt in more humble abodes as well as between themselves and their servants and slaves who labored in their shadow (Paynter & McGuire 1991: 9, 15; Foucault: 1980: 104-105). Large ornate buildings, like maps,

are material instruments of power.

The two major themes that tie together the colonial maps of Virginia are the same two themes that tie the above archaeological evidence together: a desire for control over the land in conjunction with a fear of nature and the local people. The early colonists' fear and uncertainty served to spark a fierce determination to achieve command over the environment and its human inhabitants. By the time Herrman charted his map in 1673, English colonists had made an undeniable mark on the landscape. Every free land owner in seventeenth century Virginia coveted and strived for a space of their own, and they worked hard to build a landscape which still carries this legacy of power today.

Chapter VI Landscapes in America

"...landscape seems less like a palimpset whose 'real' or 'authentic' meanings can somehow be recovered with the correct techniques, theories or ideologies, than a flickering text displayed on the word-processor screen whose meaning can be created, extended, altered, elaborated and finally obliterated by the merest touch of a button" (Cosgrove & Daniels 1988: 8)

The above examination of eight colonial English maps of Virginia demonstrates that the artistic illustrations adorning these maps are significant symbols of power. In this paper I demonstrated how maps can be understood as complex landscapes which are often adorned with meaningful artistic images. Specifically, I analyzed how English maps of colonial Virginia contain symbols of power in many forms. I then investigated how these symbols can be compared to the material culture and archaeology of early Virginia.

The possible outcomes of any social action are "background" potentials which may either be positive or negative. A background landscape is a space on which desires and fears are laid out as possibilities of everyday action (Hirsch 1995: 3, 5). The English created maps of the New World, and these maps became the background landscapes in front of which they acted during settlement. The maps in this study show us that those who used and made them were fearful of, and yet enticed by, Virginia's landscape and inhabitants. But the maps also demonstrate that this ambivalence did not overshadow their ever-present desire to own and control Virginia and its resources. For example, the timber-hungry Englishman saw many trees on the early maps of Virginia, and their need for timber fueled their interest in settlement. Yet the abundance of Virginia woodland also freighted those viewing these maps. To the English uncleared land represented an untamed, uncontrolled, and savage land. This desire for timber coupled with a fear of the

dangers lurking in unknown forests, invited settlers in come to Virginia, clear the land and make Virginia their own.

The animals depicted on the maps in this study also served as propaganda promoting the settlement of the New World. When the English saw the various animals embellishing these maps, they saw the possibility of great profits from the trade and sale of skins and furs. Also, because hunting for sport was a privilege reserved only for the upper class in England, the elite who used the maps of this period envisioned recreating the social world of England in Virginia. Yet, like trees, the animals shown on Virginia maps also elicited fear in those who looked at them. These wild animals warned settlers of the dangerous nature of the New World. By looking at the artistic maps of Virginia, the English colonist could envision a life where they could reap profits from a trade in skins, live the privileged life of an aristocratic sportsman, and rid the land of dangerous and savage creatures. These thoughts and plans about animals and trees put power in the hands of those wishing to settle Virginia.

Like trees and animals, images of people also adorned many maps of colonial Virginia. Often the figures of Native Americans were drawn very small and sometimes in static, non-threatening poses. By showing the native inhabitants of Virginia as small and passive the map makers diminished their importance and therefore dismissed their threat to English settlement. Some map makers, like Ralph Hall, showed Native Americans as savage, confrontational, and menacing. These two types of conflicting images served to equate Native Americans with animals and trees. Pictures of Native Americans that were unmoving and small (like the trees shown on the same maps) as well as frightening and unusual (like the dense forests and exotic animals) encouraged those who viewed the maps feel that colonizing Virginia would be a matter of overcoming nature, not human beings. Map makers symbolically took away any rights or power that the Native Americans may have had over their own land.

Portraits of explorers and map makers also adored many of these maps and served

to demonstrate power to those viewing these charts. These portraits show men of status and knowledge and, like the coats of arms on many of the same maps, are symbols of the power and dominion the English wished to have over the Virginia landscape. Sometimes these portraits and shields adorned maps which had little or no other artistic decoration. Images of empty spaces encouraged viewers to envision settled and civilized lands evolving as a result of imminent English colonization. Often the spaces of land on these maps were also abundant with the names of English and Native American settlements. While the many Native American sites may have frightened potential colonists, the English place names and settlements reinforced and encouraged a powerful confidence in the English ability to overcome the obstacles of nature and push ahead with plans of founding a new English colony.

But while the artistic symbols on the early maps of Virginia showed the viewer the many "background" possibilities of settlement not everyone in England or Virginia had access to cartographic charts. Indeed, only a privileged few had the wealth to buy maps or the education to use them. Because of this, the maps analyzed in this study can only tell us how some people related to the illustrated environment of colonial Virginia. In order to gain a more complete understanding of the English relationship to the Virginia landscape, one must also examine the "foreground" landscape experience of the early English colonists. In contrast to the background landscape of potentialities, the "foreground" landscape refers to the way that people relate to the environment every day (Hirsch 1995: 3). In other words, the reality of life in seventeenth century Virginia is the foreground landscape experience as compared to the background landscape of the maps.

When Virginia was first settled by the English many colonists built defensive forts as a reaction to their fear of the unknown environment around them. These structures also were a solid statement of their power and confidence. As colonization progressed this confidence encouraged some settlers of wealth to built expensive and elaborate homes. These structures were undeniable statements of wealth, status, and

power. These dwellings also allowed their owners to live comfortably and feel that they had succeeded in creating an English way of life in the Chesapeake. In order to further establish their position of power over the land as well as to establish a landscape which was familiar, the colonists also experimented with various small scale industrial activities such as glass blowing, ceramic production, and brick making. Colonists also were able to exert some control over the wilderness by hunting and trapping. These activities fulfilled a commercial demand for skins and furs and proved very profitable for many merchants. Some colonists attempted to gain profits from the sale of timber and its related products. But timber harvesting was more expensive than anticipated, and colonial efforts turned to the clearing of land for the real money maker--tobacco. And, by the end of the seventeenth century, despite many complicated and often brutal conflicts, the English had subdued the Native American threat as much as possible. The above evidence demonstrates that the English translated the fears and desires they expressed on their maps into concrete forms. By the end of the seventeenth century, the English felt that their holdings in Virginia were stable, and the images of confidence and control evident on their maps had become a reality. They successfully reconciled the images of power on the maps with their everyday experience on the ground.

Over four hundred years ago, when English colonists first claimed Virginia's fertile soil and abundant resources for their own, they began to illustrate, elaborate, and negotiate the environment on parchment, thus creating new cultural landscapes of power. As Clarke suggests, the "American map . . .was from the first used . . .as a text of ownership and control" (Clarke 1988: 456). The expression and legitimization of this cartographic control was essential to European expansion. Colonists and the imperial governments they represented used maps to demonstrate their power to other nations, their sponsors, and themselves (Harley 1992: 246). The struggle for power in colonial America was very much bound up in the notion of ownership, and maps delineated owned or potentially owned landscapes. These cartographic representations offered the

viewer controllable spaces in which to construct individual places--a positive potential. But these maps also related subtle messages of fear and uncertainty rooted in deeply set ideas about the world which the English carried to the New World. Virginia's native inhabitants and its untamed environment frightened the new colonists. These apprehensive feelings were expressed through various illustrations on colonial maps. But underlying this fear was the quest, once again, for power. This pursuit of power was soon realized on the ground as they grew confident in their ability to conquer the Virginia environment. America became a "very concrete reality to be transformed. . .to a cultivated garden, to be made fertile, to be shaped by tools and practices inherited from Europe and adjusted to the conditions of the American environment" (Cosgrove 1984:

Archaeology provides the scholar of landscapes and maps a groundwork from which to study and understand the world in which early English settlers lived. For while early colonial maps will always be useful tools with which we can study sociopolitical power relations, they remain lofty and elite *refractions* of the visible world. They always exist on the horizon of reality and thus in the "background". It is impossible to fully understand the foregrounded reality of seventeenth and eighteenth century life through traditional anthropological methods of participant observation as we will never have the power of the time machine. Only through the archaeological evaluation of human made artifacts can the modern anthropologist step in front of the filtered vision of the map and come close to grasping the process through which the early English settlers laid the foundation of the current landscape of America.

Landscape is a process-- one which we cannot escape even today. For as we deconstruct and dissect various modes of landscape representation, we again transform and manipulate their various meanings. We add layers of meaning and pieces of our own cultural baggage to the study of landscape, solidifying the notion that landscape is a never ending cultural process (Hirsch 1995).

Appendix A

Tables 1 - 8 A DESCRIPTION OF THE MAPS

Table 1a

Map Title	Map of Raleigh's Virginia	
Author	John White	
Date	circa 1585-1590	
Imprint	none	
Publication	unpublished	
Size	48 x 23.5 cm	
Orientation	North	
References	Hulton 1984: 32-33	
Description	This map is a watercolor depiction of the	
	eastern coast of North America from Cape	
	Lookout to the Chesapeake Bay. This map is	
	said to be one of the most accurate early maps	
	of the area. John White accompanied the	
	Virginia Company expedition to Roanoke	
	island where he rendered many of his most	
	famous illustrations of the flora and fauna of the	
	Virginia/North Carolina coast. His accurate	
	and detailed illustrations of local Native	
	Americans are also well known.	

John White's c. 1585 Map of Raleigh's Virginia.

Table 1b

Figure	Count	Description
Watercraft	16	6 European ships, 10 small canoes or boats
Heraldry	2	Sir Walter Raleigh's coat of arms, Royal arms
Settlements	29	28 Native sites, 1 English
Human figures	11	11 Native American figures rowing
		canoes

Illustrations on John White's c. 1585 Map of Raleigh's Virginia.

Table 2a

Map Title	La Virginia Pars	
Author	John White	
Date	1585	
Imprint	none	
Publication	unpublished	
Size	37 x 47 cm	
Orientation	North	
References		
	Fite & Freeman 1969: 92-94	
	Hulton 1984: 33-34	
	Ehrenberg & Schwartz 1980: 74-78	
	Colonial Williamsburg Foundation Library	
Description	John White drew 'La Virginia Pars' in pen and	
	ink and watercolor. The original is stored at	
	the Department of Manuscripts in the British	
	Library, London. White obtained information	
	on the Carolina/Virginia coast-line during Sir	
	Walter Raleigh's expedition to North Carolina	
	in 1584. Because White and Raleigh did not	
	explore Florida, and because the scale for this	
	area and the surrounding islands is very	
	inaccurate, it is assumed by many that White	
	based that part of the map on information from explorer and cartographer Jacques LeMoyne.	
	It is likely that he used Spanish sources for	
	information about the Bahamas and John Dee's	
	1580 map for information on Norumbega	
	(New England) and Bermuda. It is important	
	to note that because the original had been	
	folded many decorative details have been off	
	set.	

John White's 1585 La Virginia Pars.

Table 2b

Figure	Count	Description
Watercraft	6	English ships
Sea life	13	includes 2 dolphin fish, 1 triggerfish, 3 flying fish, 3 dolphins, and 4 whales
Heraldry	1	coat of arms of Sir Walter Raleigh
Settlements	17	16 Native sites, 1 English

Illustrations on John White's 1585 La Virginia Pars.

Table 3a

Map Title	America Pars, Nunc Virginia	
Author	John White-Cartographer	
	Theodore De Bry-Engraver	
Date	1590	
Imprint	in Latin, basic translation: "That the part of	
	America, now called Virginia, was first	
	discovered by the English at the expense of Sir	
	Walter Raleigh in 1585, in the twenty-seventh	
	year of Queen Elizabeth, and that the account	
	of the colony given in this book is accompanie	
	by the images of the inhabitants."	
Publication	published in Thomas Hariot's "A Briefe and	
	True Report of the New Found Land of	
	Virginia" which comprised part 1 of De	
	Bry's "Great Voyages"	
Size	30 x 42 cm	
Orientation	West	
References	Ehrenberg & Schwartz 1980: 77	
	Hulton 1984: 187	
	Lunney 1961: 18 Sanchez-Saavedra 1975: 3	
	University Manuscripts and Rare Books,	
	Swem Library, College of William and	
	Mary	
	Colonial Williamsburg Foundation Library	
Description	Like the other White maps, this one depicts the	
Description	east coast from Cape Lookout to the	
	Chesapeake. This map was the first to show	
	Virginia in detail as well as the first published	
	map to use the name "Roanoke." Decorative	
	illustrations are based on White's drawings	
	which appeared in the same volume. Prized for	
	its accuracy, the map was used by the 1607	
	expedition that established Jamestown.	

John White and Theodore DeBry's 1590 America Pars, Nunc Virginia.

Table 3b

Figure	Count	Description
Watercraft	13	8 British ships, 5 small canoes
Sea life	1	large, fanciful whale or serpent
Heraldry	2	Royal arms, Raleigh coat of arms
Flora	76	76 trees, apparent distinction between evergreen and deciduous varieties, at least 3 species shown
Human figures	13	3 depiction's of Native Americans, all based on White's illustrations, 10 Native Americans rowing canoes
Settlements	29	28 Native villages delineated by circle shaped palisades and place names, 1 English site at Roanoke
Misc.	2	mermaid figure as decor surrounding scale, also calipers atop scale

Illustrations on White and DeBry's 1590 America Pars, Nunc Virginia.

Table 4a

· · · · · · · · · · · · · · · · · · ·	The Draughte by Robarte Tindall of	
Map Title	Virginia	
Author	Robert Tindall	
Date	1608	
Imprint	none	
Publication	unpublished	
Size	46 x 84 cm	
Orientation	West	
References	Ehrenberg & Schwartz 1980: 91-94	
	Sanchez-Saavedra 1975: 4	
	Colonial Williamsburg Foundation Library	
Description	This pen and ink and watercolor manuscript is said to be the earliest map made by a colonist of Virginia. It accurately depicts both the James and York rivers as well as some Native American villages located along their banks. Tindall was the gunner to the Prince of Wales and a skilled mathematician and surveyor. He accompanied Captain Newport on his exploration of the Chesapeake in the summer of 1607. Except for a decorative border, the map is free of illustrations.	

Robert Tindall's 1608 The Draughte.

Table 4b

Figure	Count	Description
Settlements	15	14 + Native American villages are shown, 1 English

Illustrations on Robert Tindall's 1608 The Draughte.

Table 5a

Map Title	Virginia		
Author	John Smithcartographer		
	William Holeengraver		
Date	1612		
Imprint	"Discovered and described by Captayn John		
	Smith/Graven by William Hole"		
Publication	printed at Oxford, published in a pamphlet by		
	John Smith titled "A map of Virginia with a		
	Description of the Countrey, the Commodities,		
	people, Government, and Religion"		
Size	40.6 cm x 32.2 cm		
Orientation	west		
References	Bricker & Tooley 1968: 233		
	Ristow 1972: 91-92		
	Tooley 1980: 136-149 Verner 1980 University Manuscripts and Rare Rooks, Swem Library, College of William and		
	Books, Swem Library, College of William and		
	Mary		
Description	This is perhaps one of the most well known		
	maps of Virginia. Smith created this map after		
	surveying the area during his stay at Jamestow		
	in 1607. Smith is known for the many different		
	roles he played in the development of the		
	English settlement at Jamestown; specifically for his diplomatic relations with the local		
	Powhatan people. This map was so accurate		
	that it was reproduced at least ten different		
	times, each time slightly altered. Numerous		
	maps have been made by other artists which		
	were solely based on Smith's "Virginia."		
	The boilety outset of billians virginia.		

John Smith's 1612 Virginia.

Table 5b

Figure	Count	Description
Watercraft	1	English ship
Sea life	2	2 whale or sea serpent figures
Heraldry	2	Royal arms with a crown and garte as well as Smith's personal arms with the motto Vincere est Vivere (to conquer is to live)
Flora	224	224 trees of various sizes and shapes indicating diversity, at leas 5 types
Human figures	18	-far left picture illustrates Powhatan and several others with this inscription: POWHATAN/Held this state and fashion when Capt. Smith/was delivered to him prisoner"; this picture is probably a composite of various De Bry drawings -right illustration of Native American bears this inscription: "The Sasques=ahanougs/are a Gyant like people and/thus a-tired' -2 Native Americans on left shown hunting with bow and arrow
Settlements	167	legend on map indicates that many small house figures represent either "kings houses" or "ordinary houses" there is a total of 166 Native sites and 1 English one at James Towne

Illustrations on John Smith's 1612 Virginia.

Table 6a

Man Title	Vincinia		
Map Title	Virginia		
Author	Ralph Hall-engraver		
Date	1636		
Imprint	none		
Publication	published in "History Mundi: or Mercator's Atlas"; printed in London by T. Coates for		
	Michael Spark and Samual Cartwright		
Size	23.3 cm x 16.6 cm		
Orientation	West		
References	Verner 1968: 35		
	Virginia Maritime Museum Library		
Description	This map was engraved by Ralph Hall, who		
	based it solely on Smith's earlier map of the		
	same title. Hall paid little attention to accuracy		
	and added many extra details. The three main		
	illustrations decorating the map are crude		
	copies of drawings by Theodore De Bry.		

Ralph Hall's 1636 Virginia.

Table 6b

Figure	Count	Description
Watercraft	5	3 European ships, 2 small boats or
		canoes
Sea life	1	1 large whale or sea serpent
Heraldry	1	Royal coat of arms
Flora	54	54 trees, at least 8 different species are shown
Fauna	30	includes 5 hogs, 1 leopard or mountain lion, 4 deer, 8 birds, and 12 unidentifiable animals
Settlements	46	shown are 45+ Native American settlements and 1 English site
Human figures	45	3 English men on left side of map holding muskets and aiming toward right of map; 4 Native Americans on Right side of map aiming bows and arrows toward left side of map; various Native figures canoeing, dancing, etc.

Illustrations on Ralph Hall's 1636 Virginia.

Table 7a

Map Title	A mapp of Virginia		
Author	John Farrerartist		
	John Stephensonengraver		
Date	1651		
Imprint	"A mapp of Virginia discovered to ye hills, and		
	in it's Latt: From 35 deg: & 1/2 neer Florida, t		
	41 deg: bounds of New England"		
Publication	published in "Virgo Triumphans: or Virginia		
	Richly and Truely Valued" by Edward		
	Williams, London		
Size	27 x 35 cm		
Orientation	West		
References	Cummings 1974: 1		
	Ehrenberg & Schwartz 1980: 111-116		
	Colonial Williamsburg Foundation Library		
	The John Carter Brown Library at Brown		
	University		
Description	John Farrer, an official of the Virginia Co.,		
	loosely based this map on John Smith's map of		
	1612. Farrer greatly misinterpreted the		
	geography of interior America. He assumed		
	that since a large ridge of mountains were		
	discovered on the west coast, and that the Blu Ridge Mountains lay to the west of the Virginia		
	coast, that the Pacific was only a 10 days walk		
	from the mouth of the James River. This map		
	was the first to show county divisions in		
	Virginia and Maryland as well as Dutch and		
	Swedish settlements along the Delaware and		
	Hudson rivers.		
	1100501111015.		

John Farrer's 1651 A mapp of Virginia.

Table 7b

Figure	Count	Description
Watercraft	4	English ships
Sea life	7	5 large, fanciful fish or serpents 2 flying fish
Flora	31	31 diverse illustrations of trees, 8 species
Fauna	25	1 bear, 2 large birds, 7 misc. birds, 1 wolf with bird in mouth, 2 rabbits, 1 squirrel, 5 rams/goats, 1 beaver, 1 dog or wolf
Human figures	1	portrait of Sir Francis Drake
Misc.	1	small Triton figure in Pacific
Settlements	14	7 English sites are shown and 7 Native

Illustrations on John Farrer's 1651 A mapp of Virginia.

Table 8a

Map Title	Virginia and Maryland		
Author	Augustin Herrmancartographer		
	William Faithorneengraver		
Date	1673		
Imprint	"Virginia and Maryland as it is Planted and		
	Inhabited this present Year 1670 Surveyed		
	and Exactly Drawne by the Only Labour &		
	Endeveavor of Augustin Herrman Bohemiensis		
	W. Faithorne Sculpt. London, 1673."		
Publication	sold by John Seller of London		
Size	79 x 95 cm		
Orientation	West		
References	Phillips 1911		
	Ehrenberg & Schwartz 1980: 122		
	Sanchez-Saavedra 1975: 14-19		
	Colonial Williamsburg Foundation Library		
	University Manuscripts and Rare Books,		
	Swem Library, College of William & Mary		
	The John Carter Brown Library at Brown		
	University		
Description	Herrman was born in Prague in 1605 and after		
	serving in the Dutch military moved to New		
	Amsterdam in 1647. He became a successful		
	tobacco merchant and served as governor Stuyvesant's council in New Netherland		
	(N.Y.). The second Lord Baltimore later		
	granted him land in Maryland in exchange for		
	an accurate map of the Chesapeake. At the		
	time the map was sold, it was the most		
	accurate map of the Virginia/Maryland region.		
	accurate map of the sugarant start and to give		

Augustin Herrman's 1673 Virginia and Maryland.

Table 8b

Figure	Count	Description
Watercraft	10	9 European ships, 1 canoe
Heraldry	1	Calvert/Lord Baltimore shield
Human figures	10	1 portrait of Herrman, 2 Native American figures surrounding title, 7 Native Americans canoeing
Settlements	115	92 Native American Villages are shown and 43 English sites
Flora	30	30 trees are shown to indicate a boundary line

Illustrations on Augustin Herrman's 1673 Virginia and Maryland.

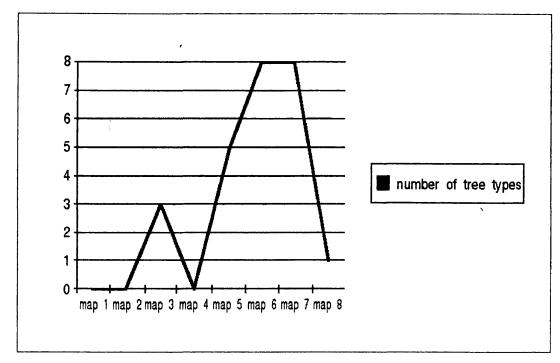
Appendix B

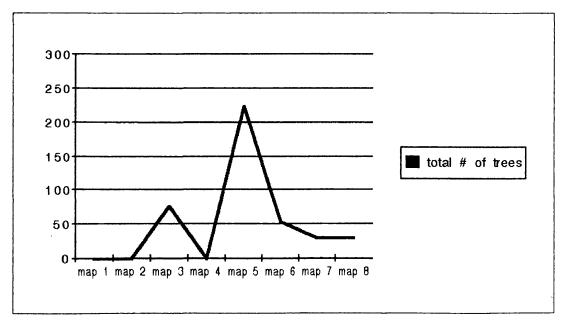
Tables 9 - 11

Table 9

These graphs show the total number of trees and the number of different types of trees shown on each map.

Table 9





1

Table 10a

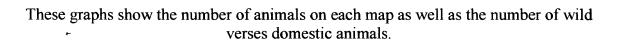
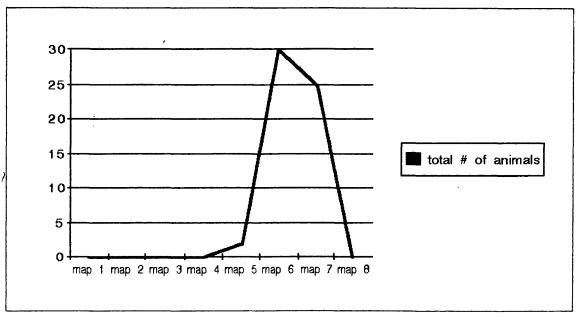


Table 10



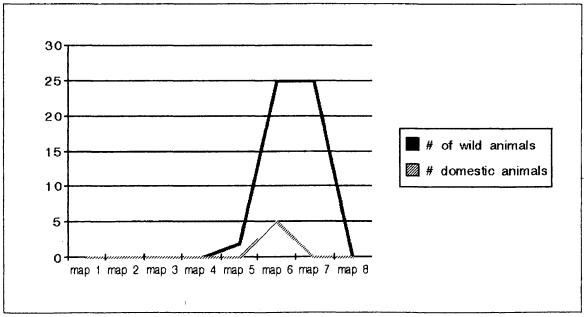


Table 10b

This graph shows the number of different animal species on each map as well as the number of commercially valuable species (i. e. valuable skins or fur).

Table 10 B

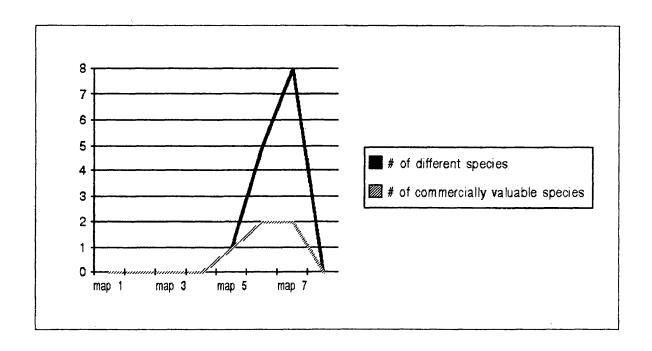
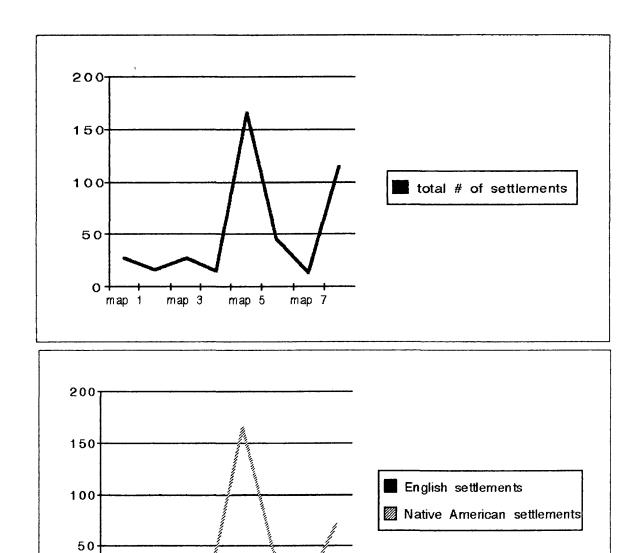


Table 11

These graphs show the number of settlements on each map. Place names (i. e. Tindall's Point, James River, etc.) and county designations were not recorded.

Table 11



map 3

map 1

map 5

map 7

Appendix C

Detailed descriptions and illustrations of the maps in this study can be found in the following publications and at the following libraries.

Map 1: Map of Raleigh's Virginia by John White, circa 1585

Hulton, Paul

1984 America 1585: The Complete Drawings of John White. Chapel

Hill: University of North Carolina Press & British Museum

Publications. (pages 33-34)

Map 2: La Virginia Pars by John White, 1585

The Colonial Williamsburg Foundation Library, Williamsburg, Virginia

Ehrenberg, Ralph E. & Seymour I. Schwartz

1980 <u>The Mapping of America</u>. New York: Harry N. Abrams, Inc. (pages 74-78)

Fite, Emerson & Archibald Freeman

1969 A Book of Old Maps Delineating American History from the Earliest Days down to the Close of the Revolutionary War. New York: Dover Publications, Inc. (pages 92-94)

Hulton, Paul

1984 America 1585: The Complete Drawings of John White. Chapel

Hill: University of North Carolina Press & British Museum

Publications. (pages 33-34).

Map 3: America Pars, Nunc Virginia by John White, 1590

University Manuscripts and Rare Books, Swem Library, College of William and Mary, Williamsburg, Virginia

Ehrenberg, Ralph E. & Seymour I. Schwartz

1980 The Mapping of America. New York: Harry N. Abrams, Inc. (page 77)

Hariot, Thomas

1588 A briefe and true report of the new found land of Virginia. Reprinted, 1931. Ann Arbor: Edwards Brothers/Ann Arbor Facsimile Series.

Hulton, Paul

1984 America 1585: The Complete Drawings of John White. Chapel Hill: University of North Carolina Press & British Museum Publications. (page 187).

Lunny, Robert M.

1961 <u>Early Maps of North America</u>. Newark: The New Jersey Historical Society.(page 18)

Sanchez-Saavedra, E. M.

1975 <u>A Description of the Country: Virginia's Cartographers and Their Maps 1607-1881</u>. Richmond: The Virginia State Library. (page 3).

Map 4: The Draughte by Robarte Tindall of Virginia by Robert Tindall, 1608

The Colonial Williamsburg Foundation Library, Williamsburg, Virginia

Ehrenberg, Ralph E. & Seymour I. Schwartz

1980 <u>The Mapping of America</u>. New York: Harry N. Abrams, Inc. (pages 91-94)

Sanchez-Saavedra, E. M.

1975 <u>A Description of the Country: Virginia's Cartographers and Their Maps 1607-1881</u>. Richmond: The Virginia State Library. (page 4)

Map 5: Virginia by John Smith, 1612

University Manuscripts and Rare Books, Swem Library, College of William and Mary, Williamsburg, Virginia

Bricker, Charles & R. V. Tooley

1968 <u>Landmarks of Mapmaking: An Illustrated Survey of Maps and Mapmakers</u>. Amsterdam, Brussels, Lausanne, Paris: Elsevier-Sequoia. (page 23)

Ristow, Walter W. (ed.)

1972 <u>A la Carte, Selected Papers on Maps and Atlases</u>. Washington: Library of Congress. (pages 91-94)

Tooly, R. V.

1980 The Mapping of America. London: The Holland Press Limited. (pages

135-149)

Verner, Coolie

1968 Smith's Virginia and its Derivatives London: The Map Collectors' Circle.

Map 6: Virginia by Ralph Hall, 1636

The Virginia Maritime Museum, Newport News, Virginia

Verner, Coolie

1968 <u>Smith's Virginia and its Derivatives</u> London: The Map Collectors' Circle. (page 35)

Map 7: A mapp of Virginia by John Farrer, 1651

The Colonial Williamsburg Foundation Library, Williamsburg, Virginia

The John Carter Brown Library at Brown University, Providence, Rhode Island

Cumming, William P.

1974 <u>British Maps of Colonial America</u>. Chicago: The University of Chicago Press.(page 1-2)

Ehrenberg, Ralph E. & Seymour I. Schwartz

1980 <u>The Mapping of America</u>. New York: Harry N. Abrams, Inc. (page 111-116)

Map 8: Virginia and Maryland by Augustin Herrman, 1673

University Manuscripts and Rare Books, Swem Library, College of William and Mary, Williamsburg, Virginia

The Colonial Williamsburg Foundation Library, Williamsburg, Virginia

The John Carter Brown Library at Brown University, Providence, Rhode Island

Ehrenberg, Ralph E. & Seymour I. Schwartz

1980 The Mapping of America. New York: Harry N. Abrams, Inc. (page 122)

Phillips, Philip Lee

1911 <u>The Rare Map of Virginia and Maryland by Augustin Herrman.</u> Washington.

Sanchez-Saavedra, E. M.

1975 A Description of the Country: Virginia's Cartographers and Their Maps 1607-1881. Richmond: The Virginia State Library. (pages 14-19)

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