"AS YOU SEE IT SO IT WAS"?

RECONSTRUCTING HISTORIC BUILT ENVIRONMENTS IN
THE USA: THE CASE OF SITES ASSOCIATED WITH
GEORGE WASHINGTON

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by

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Abstract

"As You See It So It Was"?
Reconstructing Historic Built Environments in the USA: The Case of Sites Associated with George Washington

by Esther White

This study explores the nature, function and creation of in situ, three-dimensional, full-scale reconstructions from both a professional archaeological and administrative vantage point. In situ, three-dimensional reconstructions are used at heritage sites throughout the world to interpret historical archaeological remains for visitors. This type of reconstruction is the most permanent and complete of the physical treatments used to interpret buildings that are no longer standing, presenting both great risk to the archaeological resource and the historical authenticity of the place, as well as the potential for enormous reward for both interpretation and education. This thesis analyzes criteria with potential to measure the success or failure of reconstructions and provide a broader understanding of how these buildings act as replacements for their vanished originals.

Due to the large universe of reconstructions, data from 11 archaeologically-based reconstructions, at five sites associated with George Washington, were identified to guide the discussion. The critical histories of these sites provide a textured understanding of reconstructions, and the role they play in shaping and creating a visible constructed past at tourist sites.

The 11 Washington case studies are analyzed within a framework of statements from international restoration policies and national stricture guiding and shaping how reconstructions are created and how standing structures are assessed within the United States. This analysis looks at the entire history of the reconstruction, from its creation, to the present function and utilization of the building, relying upon a full understanding of the entire cultural history of the building and historic site to assess the reconstruction. Through this nuanced and detailed exploration, criteria are addressed and 14 emerge that appear to provide both a gauge for assessing completed reconstructions and a valid foundation to guide the decision-making process when heritage site administrators and managers discuss reconstruction as a means of interpretation.

Total Words = 75,161
Dedicated to

Alma who took me to my first reconstruction;

John who helped me understand their quantity and quality;

and Harry and Jack who have shown me their potential.
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During a trip to Herculaneum many years ago I overheard a visitor ask her guide how much of the house they were looking at was original. Despite the obvious evidence for reconstruction visible, the tour guide responded, "As you see it, so it was." The visitor smiled broadly, happy to be told that the house she viewed was in direct connection with the destroyed city. That moment continues to stay with me and provided much of the underlying motivation for looking at reconstructions and the role they play in presenting the past to the public.

My views and understanding of reconstructions have been shaped by much more than eavesdropping in Italy. Two National Park Service employees were very supportive: John Jameson's comments on Mount Vernon's Blacksmiths' Shop helped shape this study; and Dwight Pitcaitley discussed and shared his views on reconstructions on many occasions providing a broader context of their history and use in the United States.

Conversations with archaeological colleagues, Dennis Pogue and Eleanor Breen provided an understanding of the relationship between archaeological field work and the interpretation of archaeological sites. Dennis and Eleanor spent many hours talking about reconstructions and their history, use and creation at Mount Vernon and throughout the United States. I value their professional work and personal friendships and thank them for giving of their time.
At the University of Leicester, Rachel Marriot and Mark Pluciennik guided me through the regulations and process of distance learning. My co-supervisor, Simon James, read and commented on drafts and answered every question asked. I learned much during our discussions, especially how reconstructions influence the understanding of the past. My primary supervisor, Marilyn Palmer, spent many hours expanding my view of reconstructions and encouraging me along the way. Her support, time and effort commenting upon, and guiding my exploration of this topic, are gratefully appreciated.

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Chapter One: Introduction, Structure and Goals

Introduction

"Archaeology is a process in which we interpret fragments in the present and apply our knowledge and imagination to create presentations of what the past might have been like. What archaeologists do is 'reconstruction'" (James 1999: 130). For public archaeologists practicing in the United States, there are a variety of methods to present the archaeological remains of the past. Among the broad range of interpretive methods used at heritage sites, the pinnacle is three-dimensional, full-scale, in situ reconstruction. These reconstructions are an interpretive, contemporary, construction of a non-extant "site, landscape, building, structure, or object in all new materials" (Department of the Interior 1995).

The use of in situ reconstructions in the United States (US) is a visible manifestation of the growth of heritage tourism during the 20th century, as visitor expectations evolved from the 19th-century (generally elite) veneration of ruins into the (generally middle class) expectation of an experiential and educational history. This type of substantial reconstruction is often founded upon archaeological data, and their level of potential evidential sophistication parallels the overall professionalization of historical archaeology. The choice of building in situ reconstructions, however, confronts archaeologists with an ethical dilemma. While all archaeological excavation is destructive to the material record of the past, these reconstructions exacerbate the damage. Their in situ placement very often destroys the original foundations upon which they sit.
As a sub discipline of anthropology, the archaeological method involves the interpretation of fragmentary evidence sifted though screens of interpretation and imagination. *In situ* reconstructions, as three-dimensional representations of former buildings, challenge the quality and quantity of evidence, by necessity advancing into the realm of historical speculation and conjecture. Ideally, the role of the archaeologist is to weigh diverse forms of evidence, balancing often-contradictory information, to recreate an accurate representation of the past. Faced with the challenges of *in situ* reconstructions, the archaeologist must decide whether the ends (the presentation of a created past) justifies the means (the destruction of the authentic past). This study examines full-scale *in situ* reconstructions and how these interpretations are constructed and utilized at historic sites in the US.

**Preservation – Conservation – Restoration – Reconstruction – Authenticity**

There is a hierarchy of authentic value inherent in the terminology used to identify the treatment of the built environment from "restoration" to "reconstruction" to "replica." There is also a historic pattern of confusion and intermingling of these terms (Fitch 1990; Pearce 1990). This blending is sometimes deliberate, imposing greater authenticity upon a historic site or building than is accurate. Publicity and marketing materials engage in this to validate a site with the most "authentic" terminology possible. An example is Colonial Williamsburg, the site of Virginia's capital during the 18th century which underwent an extensive reconstruction (strictly speaking) in the early 20th century. Yet Williamsburg is routinely
referred to as, and calls itself, a restoration, to enhance the idea that what is present
upon the landscape is real or authentic (Colonial Williamsburg Website; Lewis
2002). For this reason, it can be difficult to determine exactly what intervention a
site or building has undergone during its history.

Preservation
In the US, preservation is a treatment option for historic buildings and other
cultural resources. Preservation attempts to "sustain the existing form, integrity,
and materials" of a building or archaeological site (Department of the Interior
1995). It has its roots in the writings of John Ruskin, William Morris and the
Society for the Protection of Ancient Buildings, discussed in Chapter Two.
Preservation is an attempt to maintain a building, site or entity in its present form
without adding or removing features. There are very few examples of museums
adhering to a strict preservation ethic in the US. Drayton Hall, SC and the
Tenement Museum, NY are two examples, but most historic house museums and
sites are restored to a date or date range to focus interpretation on their period of
significance.

Conservation
The term conservation is not routinely used in the US to refer to the treatment of
cultural resources but it is used to describe the protection of natural resources. In
the US, conservation of buildings is called historic preservation. Conservation is
done to objects and building materials in the US and is the scientific intervention
to arrest decay or destruction and ensure structural integrity and longevity (Fitch 1990).

*Restoration*

Restoration is another treatment option for buildings and is the process of retaining and replicating "materials from the most significant time in a property's history" (Department of the Interior 1995). Restorations begin with a standing structure or extant feature. The accuracy and authenticity of a restoration depends upon the quantity of historic fabric retained and the quality of the modern craftsmanship. Restoration is rooted in the work of Viollet-le-Duc's efforts to bring a building back to a specific point in time as discussed in Chapter Two. Most historic buildings open to the public have undergone a degree of restoration to focus their appearance upon a period deemed significant, or the story interpreted at the site.

*Reconstruction*

In this study, reconstruction, considered another treatment option for historic buildings in the US, is the process of building in new material, with very little or more often no retention of historic fabric (Department of the Interior 1995). Additionally, reconstructions depict entities that are vanished from the landscape and rely upon physical, documentary, memory or some other data to inform their creation. Reconstructions almost always occur at heritage sites open to tourists and can be rebuilt upon the original location of their foundations / their archaeological site (*in situ*) or in a new setting (*ex situ*). They are very often
labeled "restorations" or "authentic" in a desire to heighten the veracity of the process.

**In Situ Reconstruction**

This study looks at in situ reconstructions, or those placed upon the site of their original foundations, following a definition of reconstruction established by US historic preservationists William Murtagh (2006: 6-9) and James Marston Fitch (1990: 46-47). In situ reconstructions are very often built to interpret missing elements in cultural landscapes that include extant buildings. They are also used to interpret cultural landscapes that no longer have any visible remains. In situ reconstructions, because they are constructed on the remains of foundations, usually damage these remains during their construction and often utilize archaeological evidence in their construction.

Mackintosh (1992) views the reconstruction of missing structures within an extant, built landscape as restoration, an example of blurring the terminology to foster acceptance of a treatment decision. Whether it is called "restoration" or "reconstruction" the process of new construction is defined as the latter. Together, restoration and reconstruction are two points within the presentation of the built environment and both are utilized extensively in the US. This study focuses on reconstructions and not on restorations.
In situ reconstructions are also utilized to replace buildings that are destroyed through military action or disaster. The Frauenkirche, Dresden and La Fenice, Venice are two well known recent examples of this type of reconstruction. This study does not look at this subset of reconstructions because they are not usually based upon archaeological evidence. These projects rely upon memory, photographs and drawings as the primary evidence for rebuilding.

Anastylosis, an in situ reconstruction technique whereby structures are rebuilt using original materials, is actually a hybrid of reconstruction and restoration using American preservation definitions because new material is not introduced into the finished structure (Jokilehto 2002: 89). Anastylosis is commonly undertaken with stone structures, often in the Mediterranean, Middle and Near East and South East Asia where this was a common building material. Philosophical debates about the use of anastylosis on archaeological ruins are similar to those provoked by new construction. Because of the impermanent nature of most building materials at US historic sites, anastylosis is very rarely utilized and therefore not discussed in this study.

Ex Situ Reconstructions

Ex situ reconstructions, buildings constructed away from their original foundations, are often termed replicas in the US (Murtagh 2006: 9; Fitch 1990: 47). This type of reconstruction is utilized at living history museums like Plymouth Plantation, MA; for experimental archaeology as at Butser Ancient
Farm, Hampshire; and can be combined with moved authentic buildings in open-air museums as the Weald and Downland Museum, West Sussex. *Ex situ* reconstructions are not always based upon specific archaeological examples and often combine archaeological evidence from multiple sites to create representational buildings.

**Authenticity**

Authenticity is important while thinking about reconstructions because it is one of the critical factors fundamental to a discussion of cultural heritage. Definitions of authenticity and authentic range from strict -- "genuine and original," to more lenient -- "degree of faithfulness and intentions," as conveyed by a building, object or experience (Authenticity 2007). An archaeological site often has multiple layers of remains, which are authentic because they are the actual remains of the site's existence (White 2003). *In situ* reconstruction creates something of new materials on the actual archaeological site, often causing destruction to the archaeological remains. In these cases, the authentic remains are destroyed or covered while the inauthentic reconstruction is visible.

Ideas of authenticity are fluid across both time and space. Currently the US employs a very strict definition of authentic in regards to fabric, which is highly valued as a key component of a building's significance (Department of the Interior 1990). Because a reconstruction is constructed of all (or almost all) new materials and only very rarely uses historic materials or retains original fabric,
reconstructions in the US are not considered historically authentic. Reconstructions do not carry historic value, even when based upon sound and extensive evidence and constructed with great care and historical accuracy. As Barry Mackintosh (1992: 17), former National Park Service bureau historian states, "A reconstruction, like a modern copy of an old painting, could conceivably be accurate. But it could never be authentic -- the genuine article" (see also Dushkina 2005; Fowler 1992; Huxtable 1997; Krause 1993; Pitcaithley 2004, 1989; Sellars and Pitcaithley 1979; Weeks 1994). Reconstructions that are based upon sound evidence and identified as such are authentic in the sense of truthful, a less strict definition. Likewise, visits to reconstructions can be authentic experiences for the visitor (Bruner 1994).

A Variety of Reconstructions and Reasons to Reconstruct

Archaeologically speaking, the term reconstruction refers to a wide range of methods by which past life ways, sites, landscapes, features and other archaeological data are envisioned. All archaeologists work within the present to study, interpret, and present the past. The final chapter of most excavation reports include attempts to synthesize the results of excavation through a textual reconstruction of past life ways. Exhibits, books, websites and other venues often include drawings or paintings, two-dimensional reconstructions, to aid the visual understanding of what life was like in the past (James 1996).
Over the last quarter century virtual three-dimensional or computerized reconstructions emerged as a means to present and analyze archaeological data. The advent of computerized reconstructions provided a means by which experiments could be conducted digitally into the appearance and construction techniques of various lines of evidence uncovered archaeologically. This technology provides a relatively quick and easy way to test hypotheses and pursue multiple interpretations of how archaeological evidence translates into a building or site (Allen 1998; Brush 1999; Daniels-Dwyer 1999).

Finally, there are many methods by which the remains of a non-extant archaeological site or ruin can be physically interpreted and these, and their implications for understanding the past, are explored in Chapter Three. This study deals specifically with the most extreme example of these methods, complete three-dimensional rebuilding on an original location.

The geographical range of both in situ and ex situ reconstructions included in two recently edited volumes demonstrates that complete three-dimensional reconstructions are undertaken globally and are used to interpret both historic and prehistoric sites (Jameson 2004a; Stone and Planel 1999a). Additionally, many articles on reconstruction, discuss the popularity they hold for visitors to heritage sites (e.g. Blockley 1999; Dixon and Kennedy 2000; Hill 2001; Jones 1999; Mytum 2004, 1999; Okamura and Condon 1999; Pitcaithley 2004; Ricketts 1992; Rowchhl 2003; Stone and Planel 1999b). Chapter Two includes a discussion of
why people physically reconstruct archaeological sites both in situ and ex situ, including: experimentation, education, and presentation. It is rare for a site to be reconstructed for only one reason, the mandate for most reconstructions combines several factors (Stone and Planel 1999b).

Reconstructions undertaken to test hypotheses or research into tools and materials used in the past, site formation and destruction processes, or other elements of experimental archaeology are more popular in Western Europe than they are in the US (Stone and Planel 1999a). These sites are often constructed ex situ, although usually in similar environments to the archaeological remains being studied and generally use period methods and tools in their construction as part of the scientific process (Reynolds 1999a, 1999b; Stone and Planel 1999b). Sites with a strong experimental focus include Butser Ancient Farm, Hampshire; West Stow Country Park, Suffolk; Castell Henllys Iron Age Fort, Pembrokeshire; Lejre, Denmark; Cahokia Mounds, IL; Saint Mary's City, MD; and Plymouth Plantation, MA (Blockley 1999; Council for British Archaeology n.d.; Iseminger 1997; Jameson 2004; Mytum 1999; Pearce 1990; Rasmussen and Gronnøw 1999; Reynolds 1999a, 1999b; Stone and Planel 1999b).

Almost every reconstructed site worldwide has education within its mission. In this study, education is defined very broadly ranging from a formal program for school groups, programming for families or adults, or less formal means to convey information about what life was like in the past. Because education is a ubiquitous
reason for reconstruction it is difficult to characterize placement for this type of reconstruction; they occur both *in situ* and *ex situ*.

Reconstructions undertaken primarily for educational purposes, especially those that cater to school groups and children, generally utilize a degree of living history, reenactors, or other means of dynamic interpretation to engage visitors (Blockley 1999; Reynolds 1999b; Stone and Planel 1999b). Sites with a particularly strong educational mission include the Ancient Technology Centre, Dorset; Bishopswood Environmental Education Centre, Worcestershire; Hinchingbrooke Country Park; Iron Age Activity Centre, Sussex; Trewortha Farm Bronze Age Village, Cornwall; Upton Country Park Heritage Centre, Dorset; and Jamestown Settlement, VA (Council for British Archaeology n.d.; Jameson 2004a, 1997; Stone and Planel 1999a, 1999b).

Reconstructions undertaken for presentation, which includes attempts to show cultures and people whose built heritage is not visible upon the landscape (e.g. enslaved African American life at the slave quarter at Sully Plantation, VA; prehistoric Native Americans at Ocmulgee Mound, GA; or pre-Columbian Mesoamerican cultures at Monte Albán, Mexico), reconstructions built for economic advantages (e.g. Fort Louisbourg, Nova Scotia; Irish National Heritage Park, Wexford; Fort Union, ND; Cosmeston Medieval Village, Vale of Glamorgan) and those that emphasize national or cultural identity (e.g. Castell Henylls, Pembrokeshire; Colonial Williamsburg, VA; Oerlinghausen, Germany)
are sometimes constructed *ex situ* but many presentation sites are reconstructed *in situ*. This is especially true in the US, where there is an emphasis on location, feeling, sense of place and setting as important factors that enhance the authenticity of a reconstruction's interpretation and visitor potential. *In situ* US sites constructed for one of the facets of presentation also include Carter's Grove Slave Quarters, VA; Appomattox Court House, VA; Town Creek Indian Mound, NC; Cahokia Mounds, IL; Moundville, AL; and Aztec Ruins, NM, although this list is only a fraction of the universe (see Brown and Chappell 2004; Chappell 1992; Council of British Archaeology n.d.; Culleton 1999; Hill 2001; Hunt 1989; Jameson 2004b, 1997; Jameson and Hunt 1999; Kell 1991; Mackintosh 2004, 1990; Mytum 2004, 1999; Robles Garcia 2000; Wheaton 1992).

The quality and effectiveness of reconstructions varies greatly and presently there is no means by which to evaluate these features. While *in situ* reconstructions almost always utilize archaeological evidence, *ex situ* reconstructions are both based upon specific archaeological data and a desire to replicate a specific site or building (e.g. Flag Fen, Cambridgeshire; the Scottish Crannog Centre, Perthshire; Jorvik, York; the Globe, London; Lascaux II, France); as well as representational construction whose appearance is more conjectural because they do not rely upon specific excavated examples (e.g. 1642 Village, Hampshire; Saxon House, Lincolnshire; Iceni Village, Norfolk). There are examples of *ex situ* US reconstructions, often called living history museums, that interpret specific sites such as Plymouth Plantation, MA or Jamestown Settlement, VA, but these
reconstructions differ from the former examples, because they do not utilize direct archaeological evidence in their layout and construction (see Council for British Archaeology n.d.; Fitch 1990; Jameson 2004a, 2004b; Jones 1999; Schadla-Hall 1999; Stone and Planel 1999a, 1999b)

Reconstructions in the US

Stone and Planel (1999b: 5) mention the "success and remarkable expansion of [re]construction sites, particularly in Europe and North America." This popularity and increase in the US merits exploration. US national policy and historic preservation has accepted reconstruction as one of the options for the preservation and interpretation of historic sites. Proponents of public archaeology support reconstructions as "a way to make our collective efforts in archaeology better understood and more relevant to the public" (Department of the Interior 1995; Noble 2004: 276).

The use of reconstructions at archaeological sites across the US has a long and varied history. Reconstructions were first adopted by early 20th-century archaeologists in the American southwest who were developing culture histories while restoring standing ruins at Native American sites (Jameson 2004; Willey and Sabloff 1974). During the 1920s and 1930s, as heritage tourism developed, reconstructions became a popular method to present historic sites along the eastern seaboard. Colonial Williamsburg, the first large-scale historic reconstruction
project opened to the public in 1933 popularized and legitimized reconstructions for the general public (Brown and Chappel 2004; Nöel Hume 1999).

Colonial Williamsburg's impact was felt throughout the country and influenced preservation policies at both public and private historic sites. Historic preservationist Charles Hosmer (1981: 71) terms Williamsburg's creation a "cultural revolution." Williamsburg's influence caused the National Park Service (NPS) to become more involved in historic preservation, and the New Deal, the federal response to the Great Depression, made NPS-sponsored reconstructions readily available and more affordable because of cheap labor. Passage of the Historic Sites Act in 1935 codified federal involvement in the preservation, restoration and reconstruction of historic sites (Jameson 2004b; Jameson and Hunt 1999; Mackintosh 2004, 1990).

Today, historic house museums, living history museums, and parks in America continue to follow the Colonial Williamsburg model with reconstructions occupying a large component of the heritage tourism destinations in the US. It is not unusual for multiple generations of reconstructions to grace one historic site, such as at Mount Vernon or Colonial Williamsburg, VA. As competition within the heritage tourism industry increases, and the potential positive economic impact of increased visitation, reconstructions present a costly, yet tangible and easily interpreted past for the visitor. For these reasons, reconstructions remain part of the strategic plan for many historic sites and multiple reconstructions are currently

Scope of Reconstructions in the US

Because of the fluid language used to describe historic sites and their contents it is difficult to ascertain the total number of reconstructions present in the US. The NPS's National Register of Historic Places developed Criteria Consideration E, specifications to evaluate reconstructions for listing, discussed in Chapter Three (Department of the Interior 1990: 37). According to the NPS National Register database, there are 196 sites listed with reconstructed properties and 25 of these are national parks (National Park Service 2008b, 2008c). Of the 196 sites, approximately 59 of these sites contain true "reconstructions" as defined by this thesis, while the remaining are either private homes or public sites that define themselves as "restorations."

The NPS also maintains a List of Classified Structures for its properties. This database is "an evaluated inventory of all historic and prehistoric structures" owned by the NPS (Stamm 1985: 5). There are 690 classified structures listed as reconstructions at 144 of the 390 units of the US National Park system. Of these
690 features, 289 are structural reconstructions (buildings, battlefield features or Native American mounds) while the remaining classified structures are bridges, trails, roads, service buildings and other features that do not fit this study. These 289 classified buildings defined as "reconstructions", within the scope of this study, are located on 89 parks throughout the US (National Park Service 2008a). This list does not include reconstructions that do not meet the definition of "classified" and do not hold "archaeological, historical, architectural / engineering, or cultural value" (Stamm 1985: 5). Many of the most famous reconstructions, such as Fort Necessity, Washington's Birthplace, the Valley Forge cabins and Booker T. Washington's Birthplace, are not considered "classified structures" and are therefore not on this list (National Park Service 2008a).

As these exercises suggest, quantifying the extent of reconstructions is difficult. Wikipedia identifies 45 French and Indian War fort sites in the US; 14 of these sites are reconstructions (French and Indian War Forts 2006). Two states with extensive historic properties in their care, North Carolina and Illinois, provide easily accessed assessments of their historic structures. The Illinois Historic Preservation Agency operates 34 historic sites with 12 of these containing reconstructions (Illinois Historic Preservation Agency 2006). North Carolina Historic Sites operates 27 properties with 14 having some element of reconstructed buildings present (North Carolina Historic Sites n.d.). These three examples suggest that approximately one-third of historic sites contain reconstructions.
Archaeologists and Reconstructions

While reconstructions are a presentational tool used worldwide at heritage tourism sites to improve interpretation, the history of three-dimensional, *in situ* reconstructions at historic sites in the US is indelibly connected to the emergence and growth of historical archaeology. In the first half of the 20th century, when reconstructions gained popularity, professional archaeologists were seldom involved in the decisions about planning and design of reconstruction projects; historical archaeology did not develop as a discipline until the second half of the 20th century. In many cases, early reconstructions, such as Fort Caroline, FL or the Capitol in Williamsburg, were based on limited historical studies that ignored the archaeological and historical record, to create a vision of the past, which reflected the political, social, and historical ideologies of their developers (Jameson 2004; Lounsbury 1990).

As archaeologist Audrey Horning (2006: 1) notes in her recent history of (re)constructing Jamestown, archaeology has "always played a significant role in the construction and validation of cultural mythology." Yet, archaeologists' involvement in creating reconstructions has been professionally questioned. While the reconstruction of past lifeways was an early goal of American archaeology, practitioners of anthropological archaeology have often been critical of archaeologists working to create reconstructions at historical sites as not being rooted in a theoretical basis and for a particularistic bias towards finding and interpreting structures rather than concerned with the development of culture (Fry
During the 20th century, as the discipline of historical archaeology evolved as a sub-field of archaeology and as historical archaeology found a respected place within historic preservation, archaeologists slowly began to be more involved in researching and planning reconstructions. By the end of the 20th century, with the maturation of historical archaeology, archaeologists' roles within the creation and utilization of reconstructions matured as well. Today, many historical archaeologists work to inform the creation of reconstructions while they also endeavor to discover the lives, landscapes, and ideology of the people who inhabited the buildings being reconstructed. Professional archaeologists continue to lack authority in making the initial and key decision to reconstruct (Jameson 2004a; Noble 2004).

The creation of a reconstruction is very destructive and this is a divisive factor for archaeologists involved in the creation of reconstructions. While archaeological fieldwork is also destructive, archaeologists rarely completely excavate a site and they do record data about all their fieldwork. The construction of a reconstruction however, destroys authentic fabric and without archaeological mitigation in advance of this construction, the archaeological remains are almost always destroyed without data recovery (Miller 2007).
Reconstructions in this Study

This study focuses on the subset of reconstructions that are both popular and prevalent in the US -- *in situ* reconstructions undertaken at historic sites. This subset is defined as utilizing some degree of archaeological evidence in its construction, is constructed on the location of its original foundation, is constructed at a 1:1 scale, in full three-dimensions, is usually built primarily with presentational and educational missions and seeks to present elements of the historic period where written documentation can potentially provide an additional source of data. This study recognizes that the scope of reconstructions globally, especially *ex situ* representational buildings, is much larger. The ability to look critically at the subject of reconstructions makes it necessary to limit the universe of typological examples in an attempt to define the literature about, and the theoretical approaches to, this vast subject.

Challenges of Reconstructions

While theoretical reconstruction is an accepted goal of archaeological research, the physical or structural *in situ* reconstructions explored in this study, have a controversial history within professional circles. Very few subjects in the archaeological or historic preservation literature elicit such a broad range of reactions. Many archaeologists, historians, and museum specialists abhor the practice, while others fashion careers understanding the details necessary for successful reconstructions.
Opponents to reconstructions stress the physical damage reconstructions can inflict upon the archaeological resource; the authentic image they project of a created past; and the depiction and interpretation of a single point, or phase, within the continuum of a site's history. Former National Park Service bureau historian Dwight Pitcaithley (1989) penned a scathing history of early reconstructions and the National Park Service entitled "Pious Frauds." Nineteenth-century British art critic John Ruskin (1963:135-136) viewed restoration and reconstruction "impossible, as impossible as to raise the dead" and all attempts at such "lies from beginning to end." Boston historian Walter Muir Whitehill (1966: 53) deemed them: "expensive life size toys, manufactured for children of all ages who have forgotten how to read." Two scholars view the break between restoration and reconstruction as especially perilous. Whitehill (1966: 52) says "the ship...leaves restoration and crosses the Styx to reconstruction" while archaeologist Ivor Noël Hume (1979: 336) refers to "sliding down the slippery path of speculation toward the netherworld of fantasy."

The proponents of reconstruction praise their three-dimensionality, which allows visitors to experience a site; the creation of a spatial element; the "reality" of the material world of the past; and their ability to include physical remains too impermanent to survive within the physicality of the landscape, especially when these features expand interpretation (Chappell 1992; Hill 2001; Jameson 2004a). Archaeologists involved with reconstructions call them a "powerful and influential tool" (Stone and Planel 1999b: 7), and "the most popular and appealing method of
Archaeologically based physical reconstructions are fraught with challenges because they are a dichotomy: they position the preservation of the past in opposition to the presentation of the past; they present a confident, complete past, but are merely an interpretation produced in the present; the process of creating a reconstruction often destroys what it is interpreting; by expanding one interpretation, they limit or silence the continuum of a site's history; the authentic jumble of an authentic ruin is suddenly coherent through new construction – these dichotomies which define reconstructions are crucial to understanding reconstructions and the role they play within our view of the past. One way to explore reconstructions is through an examination of their creation and specifically the decision-making process through which they are created. The process of embarking upon and creating reconstructions and the resolution of these dichotomies within reconstructions might provide insight into why administrators of heritage sites choose to reconstruct. Additionally, this analysis will expose the ramifications reconstructions have upon the archaeological resource and upon interpretation, providing an appreciation of how our past was created and how the present shapes the physical past.

All cultures seek to interpret their past. The past and the interpretation of it is a cultural construct created within the confines of the present. All reconstructions
are interpretations of the past made in the present and therefore carry political, ideological, and social meanings from their construction period. Because reconstructions are completely fabricated from new materials, they carry no intrinsic temporal or authentic value. The decision to reconstruct non-extant features upon archaeological sites positions philosophies of preservation against presentation. Like the process of archaeological excavation, creating an in situ reconstruction can result in the destruction of archaeological remains, representing the authentic past. Reconstructions force judgments and acknowledgements about how the past is preserved, what from the past is preserved, and how the past is presented – in essence, their story identifies who is in charge of the past (Beasley 2001; Bennett 1992; Blockley 1999; Brown and Chappell 2004; Canadian Parks Service 1993; Chappell and Wenger 1995; Fowler 1992; Handler and Gable 1997; Hosmer 1981; Huxtable 1997; James 1999; Jameson 2004a; Jameson and Hunt 1999; Killebrew 2004; Leone, Potter, Jr. and Shackel 1987; Linebaugh 2005, 1996; Lounsbury 1990; Lowenthal 1985; Noble 2004; Okamura and Condon 1999; Ricketts 1992; Russell and Woodall 1998; Schmidt 1999; Schuyler 1975; Shackel 2001; Stone and Planel 1999a).

The Dichotomy of Reconstruction Policy and Practice

The concerns associated with reconstructions are not only recognized by archaeologists, reconstructions also split policy makers and heritage site managers in how they view the presentation of the past. Reconstructions are "the most problematic of the range of physical treatments available to managers of historic
sites" (Pitcaithley 2004: ix). Philosophically, while not opposed to reconstructions, there is a tendency for public policies to discourage the practice because of its high cost and damaging and potentially misleading aspects. These policies officially endorse preservation of historical structures and *in situ* archaeological remains, rather than reconstruction of these resources.

Conversely, operating procedures are written with a more pragmatic view and are often supportive of reconstructions, because of their positive interpretive and economic benefits. The result, a philosophy diametrically opposed to standard practice, is explored throughout this study. The US National Park Service's guidelines for cultural resource management do "not endorse, support, or encourage" reconstruction yet the agency's Management Policies "contain only benign statements offering no hint of the restrictive nature of the guideline" (Pitcaithley 1989). The US continues to reconstruct sites even though other successful presentation alternatives are utilized throughout the country, as outlined in Chapter Three.

**Reality of Reconstructions**

Reconstructions at historic sites are powerful interpretive stages and are perceived by much of the visiting public as elements void of interpretation, able to project a "real" presence upon the landscape (Rowehl 2003). Fitch (1990: 187) suggests that the relationship of an *in situ* reconstruction at a historic site is meant to replace the vanished building or "act as its surrogate in the original sense." Professionals
involved in creating, studying and critiquing reconstructions in the US write they are creations of the present and exhibit the political, social, ideological and technological tenets of their construction period. According to these scholars, because reconstructions do not contain authentic fabric, they contain no historical integrity. But with the passage of time, they can transform into historical resources.

This progression involves a Pinocchio effect - somewhere during the process of being reconstructed and presented to the visiting public these modern interpretations of the past lose their association with the present and become, like Collodi's wooden puppet, real. Umberto Eco (1986: 8) in his essay *Travels in Hyperreality* suggests that Americans recreate as part of a deeper need. His tour of Americana led him to conclude, "the American imagination demands the real thing and, to attain it, must fabricate the absolute fake..." That the present dictates how the past is preserved, what from the past is preserved, how the past is interpreted, and presented, is readily accepted (Fowler 1992; Hosmer 1981; Huxtable 1997; James 1999; Lowenthal 1985). What is not always apparent in visiting and viewing historic sites however, is how much of the newly constructed past is actually visible and presented as authentic and real.

**The Research Question**

Drawing upon this process, this dissertation explores the nature, function and creation of *in situ* reconstructions at historic sites in the US. The history of this
problematic presentation method is explored through the examination of how reconstructions influence the popular perception of the past experienced by visitors to tourist sites. This study examines how and why in situ reconstructions became so widespread at US sites, viewing this common US practice in the context of international and national strictures that attempt to regulate and retard in situ reconstructions. Finally, this dissertation approaches a definition of what constitutes an effective reconstruction. It poses the question: Is there any way to measure the success, or failure, of in situ archaeological reconstructions and can criteria be developed which might ultimately measure their effectiveness in achieving these goals?

The initial exploration of criteria to utilize when assessing reconstructions would ultimately help site managers and preservation professionals understand the effectiveness of a site's reconstructions as an interpretive and educational device and the ethical merit behind the creation and maintenance of these structures. Developing a means to assess reconstructions will be especially beneficial to professionals and site managers as they weigh the educational, interpretive, and economic benefits of choosing reconstruction with the challenges of construction, maintenance and destruction to original fabric posed by this presentation method (Miller 2007). Developing criteria to weigh reconstructions' aims would also provide a basis for assessing what historian Dwight Pitcaithley (2004: ix) calls the "relationship to reality represented by a particular reconstruction." This would provide administrators with some measure when making decisions about the future
of the many reconstructions present at historic sites and the creation of future reconstructions.

Supplemental Research Questions
Supplemental questions addressed by this work include: How historical archaeology and the maturation of historical archaeology as a profession has influenced reconstructions? How historic sites have utilized reconstructions? How professional and ethical archaeological issues have been mitigated in the construction of these sites? How to marry an accepted amount of conjecture permissible versus evidence required to create a believable, "authentic" reconstruction? In sum how historic sites balance the diametrically opposed views towards reconstructions and the ambiguity often inherent within the evidence upon which the reconstructions are based. These subsidiary questions are relevant because the framework to address criteria which might be used to measure the effectiveness of an existing reconstruction in achieving its goals needs a strong foundation in understanding all the nuances and complexities inherent within reconstructions. Additionally, to guide future decisions about how best to interpret a site and when reconstruction might be a valid option also relies upon this solid foundation. Archaeologist John Jameson (2004b: 1) identifies this decision to interpret a site through reconstruction as

"the question facing many agencies and site managers worldwide...In contemplating a particular project, one must ask if the project meets tolerable standards of authenticity, economy, and pragmatism. Where is the line that, when crossed, takes us to unacceptable degrees of conjecture and supposition, to that 'slippery path of speculation toward the netherworld of fantasy'?"
Why Study Reconstructions at this Point in Time?

A detailed study of the role reconstructions play at historic sites in the US is especially pertinent now due to the increase in heritage tourism and the growing reliance of sites and communities to invest in and promote heritage tourism as a means of economic viability. The concept "cultural and heritage tourism" was formally adopted at a 1995 White House conference and is defined as "travel directed toward experiencing the arts, heritage, and special character of a place" (Department of Commerce and the President's Committee on the Arts and Humanities 2005: 2). A position paper published for the 2005 US Cultural & Heritage Tourism Summit (Department of Commerce and the President's Committee on the Arts and Humanities 2005: 4) posits "cultural and heritage tourism has been an engine of growth over the last decade" calling for a close relationship between the tourism industry and heritage professionals to "provide quality visitor experiences without compromising the integrity of message or negatively affecting these authentic resources."

These two conferences have reinvigorated the heritage industry in the US and this renewed emphasis on tourism to historic sites and the development of heritage venues is expected to increase over the next several years. This dissertation was undertaken with the understanding that this trend positions the interrelationships between interpretation, visitation, authenticity, research, preservation, programming, cultural resources and economic development of tourism sites at a potential opposition with each other (ICOMOS 1999). Because the pressures of
heritage tourism are being felt globally, it is hoped that this study will provide a broader perspective for administrators, managers and professionals in understanding these potentially conflicting variables as they explore a method for interpreting their archaeological resources at sites throughout the world. Stone and Planel (1999b: 6) state "the most successful construction sites, and those that have survived the longest and maintained their integrity the most seem to have achieved a balance between scientific, educational and presentational aims." This study seeks to examine this balance and how it is developed, sustained and evolved.

Basic Assumptions in the Study

This study begins with the foundation that some level of theoretical reconstruction is an expected part of the archaeological study of the past. As tourism expands and the expectations of the tourists become more sophisticated, administrators of historic sites utilize multiple ways by which the non-extant portion of their properties are interpreted and made visible upon the landscape. These methods in which archaeological sites are interpreted for the public after excavation are explored in Chapter Three. One of these methods, three-dimensional reconstruction, provides the greatest interpretive return and is therefore one of the most popular methods, albeit expensive and challenging ones, utilized at historic sites throughout the US (Miller 2007).

This work explores only a very specific type of reconstruction, those that are complete, three-dimensional building constructions, located in situ upon their
historical archaeological remains or original foundations. Their popularity and impact—upon interpretation, the historical resource and cultural landscape, and upon the institution's fiscal infrastructure—make them uniquely intriguing. In the US three-dimensional in situ reconstructions are an integral component of the historic site milieu. This study is an attempt to provide a means to look critically and systematically at specific reconstructions to attempt to discern criteria that might begin to assess if their benefits outweigh the damage they inflict upon the archaeological record and misleading quality they convey about the past.

Methodology and Case Studies

Because the universe of reconstructed sites within the US is so vast, the case studies were chosen to group around a central theme. This study analyzes reconstructions that interpret a single individual's life. It is hypothesized that the research question posed by this study will be better addressed by looking intently at a small data set that has a unified cohesiveness, yet maintains a diverse range of building functions reconstructed and age of reconstructions. By utilizing a finite group of reconstructions it is thought that a clearer understanding of the history of creating reconstructions, how they currently function at historic sites and their effectiveness, would emerge. Additionally, this study employs a biographical approach and this detailed methodology is thought crucial in understanding the nuances and texture inherent within this type of data.
The individual chosen as the case study for this work, George Washington, is not only one of the most important historical figures in American history, but his memory has had a significant impact upon the historic preservation movement and tourism industry in the US. As Chapter Four discusses, efforts to preserve sites associated with Washington were at the foundation of the historic preservation movement in America. Washington also represents the most interpreted and one of the most influential individuals in American history. As an extension of being the most interpreted figure, George Washington also represents the most reconstructed persona in the American preservation industry.

While this study focuses intently on a finite group of reconstructions, it is hoped that the methodology employed to address the research question will have a broader utilization in understanding and assessing reconstructions both in the US and on a global scale. In an attempt to weigh criteria that might ultimately prove useful in understanding the success of a reconstruction, this study begins with a narrow set of data. If successful in addressing the research question and elucidating criteria for better understanding, utilizing and planning for reconstructions then it is hoped the methodology would be expanded and become more comprehensive in scope. Ideally, the identification and discussion of criteria would be refined for administrators and managers to utilize when making decisions about existing reconstructions and the best way to interpret non-extant structures and features at historic sites.
I work for the Mount Vernon Ladies' Association, one of the sites included in the case studies. As part of this employment I have directed archaeological research resulting in reconstructions at Mount-Vernon and Washington's Gristmill and Distillery and analyzed an artifact collection for Washington's Birthplace. This experience presents me with an insider's experience into the process of creating reconstructions. My experience at Mount Vernon also provides me with the intimate knowledge of how professionals and administrators working at historic sites in the US utilize and view these resources.

Structure of the Study

Chapter Two presents a detailed review of the literature about reconstructions and international policies guiding reconstructions. This provides a context for an outline of how US governmental policies evolved throughout the 20th century in their guidance towards and utilization of reconstructions. This literature review provides the cultural and historical foundation for this study.

Chapter Three builds upon the outline of national policy and historical and cultural underpinnings by examining why the US favors both *in situ* interpretation and reconstruction as the presentation method. These choices are explored through three discussions: how the US defines integrity and significance to value interpretation on site; a brief history of historic preservation in the US, illustrating how officials have relied on reconstructions as the primary presentation tool, particularly of colonial and early American sites; and an exploration of current
interpretive methods to understand why reconstructions continue to be utilized by historic site administrators. While this work focuses on a specific type of reconstruction, this is not the only option utilized to interpret the buried past, and understanding the pros and cons within the universe of presentation options is helpful in assessing reconstructions.

Chapter Four presents the case studies used to address their creation and history, contemporary nature and function and their forecast for the future. The case studies chosen for this dissertation include George Washington's homes (Mount Vernon and Washington's Birthplace), military sites (Fort Necessity and Valley Forge), and a portion of his plantation enterprise (George Washington's Gristmill and Distillery). Together this dataset contains more than a dozen reconstructions representing both the depth of reconstructions through time and the breadth of sites reconstructed, providing historical and interpretive relevancy. The focused nature of this study's dataset should provide a controlled universe to examine archaeological reconstructions and explore criteria that might ultimately aid in measuring whether reconstructions are achieving their educational goals and are ethically legitimate additions to the historical landscape. Chapter Four is divided into sections for each historic site and contains a brief overview of site mission, history, and interpretive goals as well as the critical history of each reconstruction.

These case studies are discussed and interpreted in Chapter Five. This chapter is focused on the primary goal of the study -- to attempt to weigh criteria that might
ultimately prove useful in understanding the success of a reconstruction and if possible propose a means that might be used to evaluate the effectiveness of a reconstruction. Because an assessment of reconstructions is subjective in nature, this chapter is a detailed discussion of the case studies framed within various principles that guide reconstructions both internationally and in the US. This chapter concludes with a discussion of the criteria deemed most applicable for assessing reconstructions and a proposed grouping of measures that seem to work together to critically understand and evaluate the case studies.

Chapter Six is a conclusion with suggestions for future refinement and testing of the assessment criteria; recommendations for the future stewardship of the Washington reconstructions analyzed in this study; and final discussion of the role reconstructions play in the US. Future directions for analysis and discussion of reconstructions, both nationally and globally, are also outlined in this chapter as well as avenues for further research and expansion of the case studies into a multiregional and international sphere.

Through the detailed nature of this study it is hypothesized that those who control existing reconstructions and are in the position to plan future ones will better comprehend what Pitcaithley (2004: x) calls the "complexity and controversy" surrounding reconstructions. He suggests that only by looking at "the landscape within which reconstructions exist" can we completely understand these questions. This study is undertaken in an attempt to provide the foundation to better
understand, manage and plan how the past is created, interpreted and maintained at historic sites in the US.
Chapter Two: A Review of the Reconstruction Literature: Conservative Philosophy Versus Practical Pragmatism

Introduction to the Literature About Reconstructions

For such a seemingly complex subject, the literature on reconstructions, especially theoretical discussions of reconstruction, is not extensive. This is in part because by their nature in situ, three-dimensional reconstructions create something that is real. To deconstruct, or discuss the process and philosophy behind their creation, is to acknowledge they are not historically authentic. Besides a lack of literature, language promotes the fantasy that reconstructions are of the past. Colonial Williamsburg, perhaps the most famous US reconstruction project, presents itself as a "restoration" although about 350 buildings, including the two most prominent public buildings, the Capitol and Governor's Palace, are reconstructions, while only 88 are original (Lindgren 1993: 232).

Visitors to heritage sites go mentally back in time and the magic of this trip increases when they are told, "As you see it, so it was." Marketing, interpretive signs, guidebooks, and oral interpretation rarely publicize the extent to which a site is reconstructed, nor the process of reconstruction. If historic site professionals are hesitant to advertise the extent of reconstructions, then it is not surprising there is a dearth of literature on the subject. This review of the reconstruction literature juxtaposes the philosophical principles and ethical discouragement of
archaeological reconstructions with the pragmatic reality of the growth of the heritage industry, which increasingly demands a visible, usable past.

Moving from a brief discussion of 19th-century restoration theory, a summary of international policies that attempt to guide the use of reconstructions address the question, "How should reconstructions be utilized in the presentation of the non-extant past?" These policies, and the series of ideas that they share illustrate how internationally, preservation professionals have agreed that the process of reconstruction should be undertaken when this presentation method is chosen. From international theory and universal tenets, a history of US National Park Service (NPS) philosophy and practice and a brief overview of current Canadian and British national policies suggest the process and rigor of creating reconstructions, and the thinking about reconstructions, evolves temporally and varies culturally. This illustrates how notions of authenticity in relation to reconstructions are fluid across time and space. Motivations for creating both in situ and ex situ reconstructions are reviewed to understand how these creations are used by archaeologists and other professionals in archaeological analogy, utilized by tourist attractions to advance both educational and interpretive missions, and can contribute to an area's economic prosperity through the creation of jobs and encouraging tourism. Finally, literature about how the public perceives reconstructions and heritage sites that commonly use this interpretive method are appraised.
Given the focus of this study, on archaeologically-based, three-dimensional, in situ reconstructions from the institutional and professional standpoint, the majority of this literature review is centered on this subset of the reconstruction debate. Other types of reconstructions, especially replicas or ex situ reconstructions and how the public views and thinks about reconstructions, are briefly explored in the third section where the motives behind the creation of all types of reconstructions are examined but are not the overall focus of this study.

19th Century Restoration Theory

The philosophical debate over the presentation method for constructed heritage is the basic idea surrounding reconstructions on archaeological sites. Should sites be reconstructed is fundamentally a question of restoration versus preservation -- whether the authentic fabric or ruin of the past, exposed through archaeological excavation, should remain as the interpretive focus of the site; or if the archaeological remains should be restored to a specific point in time. This debate is rooted in the 19th-century restoration philosophies that still influence Western ideas of building restoration, as well as definitions of significance, authenticity, and heritage.

E. E. Viollet-le-Duc's work exemplifies restoration philosophy. This French restoration architect believed one could (and should) return buildings to a complete state, even if this state was representational. In fact, Viollet-le-Duc preferred a representational or conjectural state or "unity of style," which he felt exhibited a
visible coherence to design choosing beauty over authenticity. In Viollet-le-Duc's view, reconstruction of missing elements was necessary to achieve this snapshot of the past, creating a work of fiction favoring aesthetics and story (British Columbia Heritage Trust 1989; DuPont 1966; Hosmer 1981: 953-954; Lowenthal 1985: 278-282; Matero 1993:15; Ricketts 1992).

The antithesis of Viollet-le-Duc's principles was initially espoused by John Ruskin and championed by William Morris. Ruskin and Morris, important figures in the 19th-century British conservation movement influenced theory through their writings against the restoration and reconstruction of the built environment. Ruskin's (1963: 135) opposition to restoration was extreme; in 1849 he wrote it was "as impossible as to raise the dead, to restore anything" since restoration creates a "lie." His compatriot Morris, founder of the Society for the Protection of Ancient Buildings, favored conservation (known as preservation in the US) and found nothing incongruous in the presentation of multiple time periods, regarding the site as a document (Lowenthal 1985). This presents, not an incomprehensible tangle, argued Morris, but evidence of a site's true history (British Columbia Heritage Trust 1989; English Heritage 2001a; 2000). According to this philosophy, to restore, reconstruct, or clear a site, is to destroy this history. When restoration is necessary, this school argued for clearly identifiable materials (Lowenthal 1985: 280). This practice presents the site as a work of non-fiction, stressing authenticity over beauty.
These individuals were not archaeologists and their work was not developed to deal with archaeological remains or sites as the foundation of their philosophies. Instead their writing was primarily focused upon art history and architecture and how the built environment should be presented and maintained. During the late 19th and 20th centuries, as archaeological sites became a focus of the presentation of the past, questions about how non-extant remains would be presented to the public called upon the divergent philosophies of these two schools of preservation theory for guidance. The Ruskin / Morris school advocates an archaeological site should be presented in its totality, with multiple time periods and features preserved to be appreciated and understood as the entirety of the site's history. By contrast, the French school espouses an archaeological site reconstructed to a specific point in time, creating a snapshot of the past focused upon a particular view.

Ruskin and Morris's ideas and those of the Society for the Protection of Ancient Buildings remain the foundation of British philosophy regarding the presentation of monuments and sites, espousing "conserve as found" as the chosen alternative. Their ideas are also very influential in US preservation theory, although in practice the US combines both an English-based preservation philosophy with le-Duc's work as the foundation of restoration principles (British Columbia Heritage Trust 1989; Dixon and Kennedy 2000: 9, 59-65; English Heritage 2001a; 2000; Fowler 1992; Hosmer 1981; Lowenthal 1985: 278-280; Matero 1993: 15; Ricketts 1992; Ruskin 1963; Summerson 1966). The presence of masonry ruins in Britain and the
impermanence of much of America's structural past is one factor in the different views regarding restoration treatment of the built environment in these two countries. A review of international charters guiding historic preservation work further reinforces the idea that treatment of structural and archaeological heritage is culturally dictated.

**International Charters**

Growing out of the 19th century philosophical debate and practice of restoration efforts concerning how buildings, ruins and sites should be maintained and presented, a series of international charters provides broad guidance, or as Weeks (1994) calls it, "rules of fair play" upon nationalities' efforts to create a coherent visible heritage industry. These charters illustrate a world-wide concern for the pressures of heritage tourism, global efforts to interpret the past and the fragility of the archaeological record, and their language grows more sophisticated and responsive to these pressures through time. The charters are significant because they document the evolution of theory and philosophy guiding reconstructions, which are critical in understanding this controversial topic. Although these charters have little direct effect on national policy or guidance, they do serve to influence both federal and private reconstruction philosophies and are therefore an important foundation for assessing the broad issue of site presentation and by extension site reconstruction. These issues form a framework through which this study seeks to explore historical and contemporary reconstructions.
The Athens Charter for the Restoration of Historic Monuments (First International Congress of Architects and Technicians of Historic Monuments 1931) was the earliest international agreement to address reconstructions. This document acknowledges the value of the built heritage and the care that should accompany the preservation of this resource. This doctrine was a direct response to the restoration philosophy growing from Viollet-le-Duc's work and writing and a number of controversial late 19th and early 20th century reconstructions, perhaps most notably being Sir Arthur Evans's reconstruction of Knossos (Jokilehto 2002). The Charter proposed restorations when necessary occur "without excluding the style of any given period" (Article I).

In terms of reconstructions, Section VI, The Technique of Conservation, calls for the "close collaboration between the archaeologist and the architect." This theme was further developed in later charters. The inclusion of archaeologist as a specialist who was knowledgeable about a segment of the past was an important statement within the Charter and laid the foundation for scientific knowledge as a basis for restoration and reconstruction. Hosmer (1981: 888-952) details that before the 1940s the archaeological profession lacked universal respectability and was not seen as crucial to creating authentic reconstructions within the US.


Venice Charter 1964

The Second International Congress of Architects and Technicians of Historic Monuments, held in Venice, Italy in 1964, adopted the Venice Charter, still considered a keystone of conservation philosophy. Although it was mainly concerned with architectural restorations, three positions are included in Articles 9 - 15 significant to a study of archaeological reconstructions. These three ideas, that restorations should not contain conjectural elements, should include archaeological study, and ruins must be maintained, form the basis for the current philosophy guiding reconstruction theory.

Article 15 attempts to place value on the understanding of the past, especially in the ability of a ruin or site to be interpreted and understood. The charter specifies, "every means must be taken to facilitate the understanding of the monument." However, reconstructions are not a part of this vision, as the next sentence stated, "all reconstruction work should however be ruled out a priori."

The dichotomy between preserving an archaeological ruin and facilitating interpretation through reconstruction, which impacts the authentic fabric of a ruin, is the controversy at the root of reconstructions. By juxtaposing preservation with interpretation, the Venice agreement acknowledges a value in understanding the past and the price this can place on the authentic fabric.
Burra Charter 1979

While not technically international, the Burra Charter (Australia ICOMOS 1999), originally adopted in 1979, was the first attempt to address multicultural notions of significance and heritage, two concepts that make this document globally significant. Growing directly from the Venice Charter, it addresses a number of reconstruction issues. It identifies reconstructions as a valid conservation treatment when necessary to augment or convey "culturally significant aspects of the place" (Article 18, italics original). Additionally, Burra extends the restriction of the use of conjecture to reconstructions. Article 20, specifies that reconstructions should be easily identifiable or interpreted as such.

The significance of "place" or "sense of place," as initially outlined in the Burra Charter, is a common justification for reconstructions. This concept links places with cultures and the physical aspects of the present with a conceptual past (Cameron 2000; Canadian Parks Service 1993; Lipe 1984; Shackel 2001). The understanding of a place depends upon the context of the "whole." Through reconstruction, missing features, lost elements, and absent structures are replaced upon the landscape. The recreation of the larger context conveys the expression of the whole (Miri 2000). The expansion of the idea of place as significant for cultural understanding is frequently used to justify reconstructions.

The Burra Charter is also important for acknowledging that there are multiple notions of significance or values for historic sites and that how sites are viewed
varies depending upon the specific group or constituency who is assessing it. This notion of a values-based approach, where both traditional, or the academically-derived historical and research-based view of significance is equal to economic, educational, ecological, social, aesthetic, or spiritual importance placed upon a site by multiple other groups, was a direct outgrowth of this document. This values-based approach to stewardship of historical sites is changing how these places are managed, interpreted and experienced by the public and is one reason given for an increase in decisions to reconstruct (English Heritage 2001b; Grenville 2006; Mason, MacLean, and de la Torre 2003).

Lausanne Charter 1990

The ICOMOS (1990) Charter for the Protection and Management of the Archaeological Heritage, also known as the Lausanne Charter, deals specifically with archaeological heritage. In Article 7, reconstruction is listed as an option to achieve research and interpretive goals. Five principles guide the use of reconstruction: the reconstruction should be able to incorporate changes as research and interpretation revise understandings of the past; avoid disturbance to the archaeological remains; use multiple sources of evidence "to achieve authenticity;" "where possible and appropriate" do not build on the original remains; and the construction should be identified as a reconstruction. The detailed discussion of reconstruction in this document is a clear response to the fact that reconstructions were, by 1990, becoming increasingly popular at historic sites around the world. These five themes are the foundation of modern national
guidelines governing and commenting on reconstructions (Department of the Interior 1995; English Heritage 2001a; Parks Canada 1994) as well as the foundation for much of the debate about reconstructions as a presentation treatment.

**Nara Document on Authenticity 1994**

The Nara Document on Authenticity (UNESCO 1994) was the product of an international gathering in Japan to explore the concept of authenticity and how it relates to cultural heritage. The conference was a response to the narrow view of how authenticity was defined by western Europe and North America (Grenville 2006: 83). The resulting document states that the concept of authenticity is a fluid construct whose definition varies culturally. Therefore, it is not possible to assign fixed global values upon authenticity. It also states that views of authenticity are fluid through time. The impact of the Nara document was that international conservation policy began to occur on a more regional level.

**Declaration of San Antonio 1996**

A direct result of the Nara Charter's (UNESCO 1994) assertion that authenticity is a cultural construct, the Declaration of San Antonio (ICOMOS National Committee of the Americas 1996) discusses authenticity within the Western Hemisphere. Similar in scope to the Burra Charter, this document links cultural heritage with cultural identity and recognizes the importance of this to cultural memory. Cultural differences in integrity, authenticity, and values are explored.
Variation, or choice, in restoration treatment is acknowledged as being culturally driven. Significantly, however, all the participatory nations agree that authenticity exists only for the historic fabric and conjecture should not be a method used for reconstruction or restoration.

The San Antonio Declaration is the strongest of the charters in its language concerning archaeological sites and their inherent authenticity. This document views archaeological sites as fragile, non-renewable entities whose authenticity is easily destroyed. It acknowledges the destructive process of excavation and calls for rigorous documentation and dissemination of archaeological information to maintain value. Interpretation of archaeological sites can only reflect the fluidity of values and therefore cannot be authentic, merely honest and objective. To maintain this objectivity and honesty in interpretation, the physical remains must remain intact, able to inform evolving questions (Section 5). The Declaration also voices a strong opposition to tourism and economics being the deciding factors for conservation or presentation. Article 7 specifically addressed archaeological reconstructions:

In the Americas, the authenticity of many archaeological sites has been compromised through reconstructions. In spite of their educational value, reconstructions aimed to promote tourism reduce the authenticity of such sites by involving new hands, new materials and new criteria, and by altering the appearance of the site.
Riga Charter on Authenticity and Historical Reconstruction in Relationship to Cultural Heritage 2000

At a regional conference on authenticity held in Riga, Latvia, UNESCO members from Balkan States and former Soviet countries joined delegates from the US, UK and Canada. The Riga Charter is a response to the concern over reconstruction and authenticity in newly independent nations "because of the large number of proposals now being planned and realized." The document adopts a "presumption against" reconstruction except when "it recovers the cultural significance of a place," is necessary for the continued existence of a structure, or in the event of disaster or damage. These criteria are actually very broad and flexible and Dushkina (2005: 2) suggests this document undermines the Venice and Athens Charters. Other authors are less critical but still view this as a more tolerant approach to reconstructions (Grenville 2006; Stanley-Price 2006)

The document reinforces the idea that authenticity is directly related to ideas of significance and that "replication...is in general a misrepresentation of evidence of the past" (part 4). The purpose of reconstructions is to "reveal the significance of the cultural heritage" (part 3). Rather than reconstruct, this document suggests that money and effort be spent on repair and maintaining existing architecture, but that reconstructions after disasters might be acceptable. Besides continuing to reinforce the idea that authenticity and presentation are culturally dictated, the Riga Charter is also important because it acknowledges the great pressure on governments, especially newly independent governments, and properties to reconstruct.
Ename Charter for the Interpretation of Cultural Heritage Sites 2007

The ICOMOS (2007) sponsored Ename Charter seeks to provide guidance for both interpretation and presentation recognizing that they are "part of the overall process of cultural heritage conservation and management." The Charter recognizes and stresses that authenticity, and by extension fabric, is crucial to an understanding of the past as stated in the Nara Document (UNESCO 1994). It also holds "scientific and scholarly methods" (Principle 2) as crucial for gathering evidence to create quality interpretation but fails to make as strong a case as the San Antonio Charter (1995) for the fragility of archaeological remains and other historic fabric. The final draft of this document does not dwell on interpretive method, but states that this choice "should consider all aspects of the site's cultural, social, and environmental significance" (ICOMOS 2007: 3.1).

When viewed chronologically, these international charters show the growth of reconstruction as a presentation method from the 1930s to the present. The space devoted to reconstruction as a viable way to portray the past increases in the later documents and there is a growing attempt to document when reconstructions should occur and how they should be undertaken. After the Venice Charter (Second International Congress of Architects and Technicians of Historic Monuments 1964), the parameters guiding reconstructions increase, as does the language conveying the significance of the archaeological remains. While the policies attempt to dissuade against reconstruction in favor of ruins, the most recent charters -- Riga and Ename -- suggest that the popularity of heritage tourism
is placing increased pressure on easily deciphered presentation and interpretation. This is indicative of the shift to a values-based approach to management codified with the Burra Charter where competing values (e.g. economic, historic, aesthetic, scientific, land-use, heritage) are weighed for individual sites (Grenville 2006; Mason, MacLean, and de la Torre 2003; Stanley-Price 2006).

**World Heritage List Operational Guidelines**

The Operational Guidelines for inclusion on the World Heritage List (UNESCO 2005), while technically not an international charter, is important because it serves as a global attempt to harness many of the ideas discussed in these documents into practical guidance. Reconstruction is mentioned in paragraph 86 in the discussion of authenticity. "In relation to authenticity, the reconstruction of archaeological remains or historic buildings or districts is justifiable only in exceptional circumstances. Reconstruction is acceptable only on the basis of complete and detailed documentation and to no extent on conjecture." Not surprising, this mirrors the thinking in the recent international charters and calls for high degrees of evidence, no conjecture and a vague justification of "exceptional circumstances" to rationalize a reconstruction's authenticity to warrant inclusion on this list.

**Five Guiding Principles**

The eight internationally significant statements concerning reconstructions on archaeological sites and the World Heritage List's Operational Guidelines, while not endorsing this interpretive method, agree to five principles to provide guidance

- Conjecture should not be utilized. Reconstructions will be enhanced in correlation with the amount of evidence brought to bear, especially when the evidence is from multiple sources.
- The construction should be identified as a reconstruction.
- They should be easily revised as interpretations change.
- Avoid disturbance to the archaeological remains.
- Avoid, when possible, constructing on the original remains.

Besides the international charters, these principles are outlined in Jameson and Hunt's (1999; see also Jameson 2004b and Macintosh 2004; 1990) review of US reconstruction philosophy, Okamura and Condon's (1999) review of Japanese reconstruction philosophies and Pogue, White, and Leeson (2002), further suggesting that these themes are universal and form the basis of reconstruction theory.

_Evidence Versus Conjecture_

The diversity of evidence, how to weigh disparities of evidence, and when enough evidence justifies a reconstruction is a universal dilemma in decisions to reconstruct. In general, reconstructions on archaeological sites have at most five
direct, or primary, sources for evidence, each with their own difficulties. Sites may have archaeological remains (features, artifacts and architecture buried and only visible through excavation), architectural remains (remains of structures or ruins visible above ground), documentary data (textual evidence for a structure), pictorial data (drawings, photographs, or plans), and ethnographic data (oral history or memories). Additionally, reconstructions are also guided by indirect, or secondary evidence, or similar categories of information from contemporaneous sites.

Generally, reconstructions based upon more facts and a variety of data are more accurate representations; fewer avenues of evidence often result in a less accurate reconstruction. Almost all reconstructions incorporate some level of conjecture (Brown and Chappell 2004; Mackintosh 1990; Noble 2004; Pogue, White and Leeson 2002; Sellers and Pitcaithley 1979). That is one of the challenges of three-dimensional reconstructions, in the process of putting all the pieces together, to create a complete, furnished structure, there are elements that must be guessed at or conjectured, no matter how much evidence was assembled. The challenge, as Noble stresses (2004), is on using sound interpretations and diverse bodies of evidence. Two-dimensional reconstructions employ conjecture as well although conjectural elements can be eliminated through perspective and other tricks (Brown and Chappell 2004; James 1996; Noël Hume 1969). There is no magical number concerning the amount or variety of evidence needed to commence a reconstruction.
Purely conjectural and representative structures, which were a staple of early US reconstruction efforts (e.g. Morristown, NJ; Valley Forge, Fort Loudon and Pennsby Manor, PA; George Washington's Birthplace, Booker T. Washington National Monument, VA; Grand Portage National Monument, MN), are generally no longer undertaken (Jameson 2004b; Jameson and Hunt 1999; Macintosh 2004). However, some authors view the use of indirect evidence, although a definite source of conjectured data, as having a valuable role in the presentation of the reconstructed past. Because some types of sites, American slave quarters for instance, have very little direct evidence; they can only be recreated with generalizations and documentary, archaeological, visual, and structural evidence from other sites, and larger degrees of conjecture. Chappell (1992), Heath (Hill 2001), and Brown and Chappell (2004) all feel a larger degree of conjectural data is permissible to bring certain populations to light, as well as to right what Mytum (2004: 97) terms the "presentational imbalance" evident in extant and non-extant remains. Reconstruction places the structures, and therefore interpretively the people who lived in them, back into the "sense of place." These authors feel it is more ethical to employ a degree of conjecture to ensure that these types of sites are visibly interpreted.

At best, reconstructions are an interpretation of evidence, presenting a powerful snapshot of a past; at worst, they portray a history that never existed (Pitcaithley 2004; Sellers and Pitcaithley 1979). Because all cultures create the past, the evidence and the interpretation and use of evidence within a reconstruction are a
reflection of the period and personalities creating the construction (Blockley 1999: 21; Brown and Chappell 2004; Chappell 1992; Lounsbury 1990; Lowenthal 1985). This dictates the need for reconstructions, as well as conjectural elements, to be identified. They should also include an explanation of evidence and how disparities in evidence were reconciled.

Identification

In *The Constructed Past*, an edited volume devoted to reconstructions, Peter Stone and Phillipe Planel (1999b: 2) eschew the phrase "reconstruction" in favor of "construction" because these sites can never be "reconstructions of actual places, but are constructions based on contemporary interpretations of the place." It is not clear however, how often in situ reconstructions are identified as modern constructions and identification controls the public's awareness of what visible elements are fiction and which are non-fiction. Clearly the confusion and mingling of preservation terminology exacerbates the issue of identification and makes it difficult to ascertain where the line between restoration and reconstruction lies.

Wheaton (2004) cautions that without adequate labels, reconstructions are viewed as authentic. Even when a structure is labeled, without marking conjectured elements and a discussion of the use of evidence, the construction is often regarded as accurate. Fowler (1999: 250) sees a dichotomy within the labeling system utilized: providing reference to reconstructions and the process of their creation
provides authenticity; explanation of the process used to create the structure provides honesty to the creation. Jameson (2004b), views these identifications as being another dimension to the educational value of reconstructions. That an unlabeled reconstruction is viewed as authentic is testament to the power of the constructed past and it is this powerful image which makes three-dimensional reconstructions such popular presentation choices.

Without some identification of the academic process of creating the reconstruction, independent evaluations concerning the success or failure of a building or element cannot be undertaken (Pitcaithley 2004; Wheaton 2004). Brown and Chappell (2004) go a step farther and assert that identification aids the deconstructive discourse about a property, allowing the public to explore interpretations and the choices that created the display. Unfortunately, this level of explanation is almost never provided. It is contrary to the underlying reason so many sites choose reconstruction. Because of the power and authentic nature of reconstructions they easily blur, or often obscure, the boundary between fiction and non-fiction (Blockley 1999; Killebrew 2004; Wheaton 2004). If reconstructions are perceived as authentic, thereby increasing the power of their site, to label or disclose their true nature or the process of their creation, would contradict their purpose. James (1999: 119) questions how two-dimensional reconstructions can convey all the decisions creating their depiction, and this dilemma translates to the constructed interpretation as well, "when all looks equally solid."
Easily Updated

The third tenet calls for reconstructions to be fluid, easily updated as interpretations of evidence evolve. Because of the expense in creating a reconstruction modifications or updates to portray new interpretations, research, or periods, is not an easy undertaking (Huey 1990; Hunt 1990; Killebrew 2004; Mackintosh 1990; Okamura and Condon 1999; Weeks 1994; Wheaton 1992; White 2004). Both Bennett (1992) and Fry (2004) even question why insignificant changes should ever be made if the visitor will not see or recognize the modification. The permanency conveyed by reconstructions could also be confusing as Wheaton (1992) mentions when used to portray impermanent architecture or a short-lived site.

Ricketts (1992) succinctly explains that ethically to update a reconstruction depends upon their cultural definition: interpretive devices, like a museum exhibit, can be updated and evolve with new interpretations of evidence; reconstructions that are preservation tools possess heritage character and should not be augmented because they have a value related to their construction period. Other authors (Brown and Chappell 2004; Chappell 1992; Stone and Planel 1999b) view the ability to evolve as a positive benefit. Not only does it reinforce that all history is interpreted and fluid, it also keeps the site fresh and research in the forefront. In the US, the NPS developed Criteria Consideration E of the National Register of Historic Places to evaluate reconstructions that are part of a larger landscape or district being nominated to the national listing of important places. Criteria
Consideration E was developed to assess reconstructions at Colonial Williamsburg due to that institution's desire to be recognized as a historic site (Department of the Interior 1990). This Criteria Consideration and the National Register is explored in Chapter Three.

Related to this point, the desire to present a coherent story, combined with the difficulty of presenting multiple periods or stories, causes an approach to the presentation of the past philosophically as Viollet-le-Duc approached restorations, beauty, or unity of style is preferable to complete truth. Many sites choose one time period and one story, or point of view, to interpret. Reconstructions extend this idea, with their permanent characteristics generally forcing one period of presentation to be interpreted. In the US, where reconstructions have a long history, significance is used to make judgments over the interpretive periods and stories conveyed at a site. Because ideas of significance are fluid through time, as well as across space, this measure can be at odds with the permanent nature of a reconstruction (Australia ICOMOS 1999; ICOMOS National Committee of the Americas 1996; UNESCO 1994).

Chappell (1992) and others point to archaeology's impact over the past half-century to increase the points of view conveyed at a site (Brown and Chappell 2004; Handler and Gable 1997; Hill 2001; Lawson 1995). While this is increasing, interpretation of multiple time periods at one site remains elusive. The literature philosophically debates this notion, and the reconstruction's static
Presentation is one of the debated theoretical issues. Because history is a continuum with no beginning, end, or clearly defined segments, a fluid history is difficult to reconcile with a newly reconstructed past (Weeks 1994). The discussion over the presentation of a fluid past or static past goes back to the ideas of conservation and restoration developed in the 19th century. The choices of which period and point of view to interpret, illustrate the political, social, ideological and economic agendas influencing how the past is presented and how resources are sacrificed to satisfy contemporary needs (Hoagland 2001; Huey 1990; Hunt 1990; Killebrew 2004; Leone, Potter and Shackel 1987; Lounsbury 1990; Lowenthal 1985; Mackintosh 1990; Noble 2004; Ruskin 1963; White 2004).

Protection of the Archaeological Resource
The fourth and fifth tenets, to avoid disturbance to the archaeological or authentic remains and to avoid, when possible, constructing on the original site, are interrelated. Ruskin (1963) was averse to disturbing authentic fabric and warned against the consequences of losing elements of a site's history to replace it with a copy. There is almost universal agreement that reconstructions should never harm the archaeological record and many authors use this as a primary reason not to reconstruct (Huey 1990; Hunt 1989; Killebrew 2004; Mackintosh 1990; Noble 2004; Pogue, White and Leeson 2002; Sellers and Pitcaithley 1979; Weeks 1994; Wheaton 2004; White 2004). The archaeological remains represent a source of evidence, represent the authentic mark of history; and are often the best documentation about a site's history.
Site managers are often forced to decide between the competing forces of preservation and presentation, and by extension, reconstruction. Reconstruction, one of the most desired presentation devices, is also the most detrimental to preservation (Ricketts 1992; Wheaton 2004, 1992). Unfortunately, as discussed above, many administrators weigh presentation needs more heavily than preservation; why certain cultures choose reconstruction as a presentation method is explored in this thesis. Many reconstruction projects incorporate some degree of archaeology to gather evidence for the new construction. Likewise, some are able to incorporate authentic fabric into the new construction. But more often, reconstruction destroys archaeological remains, especially from periods not deemed significant for interpretative purposes.

While complete excavation is ethically rarely justified, in the case of a predetermined reconstruction it is (Hunt 1989; Noble 2004; Pogue, White, and Leeson 2002). As discussed below, for a period the US National Park Service attempted to discourage onsite reconstruction by requiring complete excavation with limited success. Unfortunately, the economic and practical expense of complete excavation and curation, is generally not factored into the reconstruction budget and therefore seldom undertaken, especially in an archaeologically ethical fashion. While the recovery of information through archaeological excavation is a better alternative than destruction through construction with no data recovery, onsite reconstructions are never beneficial for the resource.
Weeks (1994) argues that excavation is never equal to preservation, and the destruction of the authentic fabric is not justified through mitigation. Likewise, Mackintosh (1990), asserts that data recovery is "selling out" the resource due to political and economic pressure. What Mackintosh does not address, however, is that often archaeologists are not involved in decisions to preserve or interpret archaeological sites. Numerous authors recognize this failure and discuss the ramifications authority has upon the presentation method, preservation, decisions about what to interpret, and degree of mitigation undertaken (Hunt 1989; Killebrew 2004; Noble 2004, 1991; Okamura and Condon 1999; White 2004). Okamura and Condon (1999) feel there should not be a dichotomy between preservation and presentation of the past and that post-exavation sites should be interpreted. They suggest that archaeologists lack authority in the decisions to present the past and that this is a failure within their discipline. John Jameson's edited volume The Reconstructed Past (2004a) specifically addresses the lack of archaeological input in the planning for presentation at historic sites. The archaeological resource will continue to face threats until more archaeologists direct both the excavation and presentation decisions (Henry 2007; Hurry and Bodeman 2007).

Clearly the best alternative for the archaeological resource is to construct replicas off site or ex situ. Surprisingly, the reconstruction literature is divided in regards to this philosophy, arguing the dilemma between presentation and preservation. To construct offsite destroys the authenticity afforded by the concept "sense of
place," removing the structure from its context (Australia ICOMOS 1999; Cameron 2000; Canadian Parks Service 1993; Department of the Interior 1990; Lipe 1984; Shackel 2001). If reconstructions represent a fictional view of the past, reconstructing offsite represents an exponentially greater fictional view. The philosophical question becomes, "Is the survival of the authentic fabric more important than the accuracy of the presentation?" As the next chapter argues, cultural notions of authenticity and significance within the US place enormous pressure on those in power to place interpretation on the actual site rather than elsewhere.

Because the authentic resource is non-renewable, and when destroyed it can never be replaced, many argue that reconstructions are rarely justified and that other methods of interpretation are therefore better choices (Hurry and Bodeman 2007; Mackintosh 1992, 1990; Miller 2007; Pitcaithley 1989; Ruskin 1963; Sellers and Pitcaithley 1979). The past that the archaeological resource represents, and the use of this past, however, is more complex, and many authors suggest that this past should be experienced. They feel the most successful method of interpreting the past, in terms of visitor appreciation, is via reconstruction (Stone and Planel 1999a, 1999b; Jameson 2004a; Jameson and Hunt 1999; Miller 2007; Okamura and Condon 1999). To fully understand and appreciate a reconstruction, some argue, it must be experienced upon the original site, within its original landscape (Blockley 1999; Hunt 1990; Jameson and Hunt 1999; Miller 2007; Okamura and Condon 1999; Wheaton 1992). Jameson and Hunt (1999) contend that offsite reconstructions when used in conjunction with remains can be valuable
educationally presenting multiple interpretations. Schadla-Hall (1999:105), however, points to the legitimacy and power in situ reconstructions convey, regardless of accuracy. The purpose of all reconstructions is to present an image, and a three-dimensional image constructed within its authentic setting presents a greater degree of believability.

Virtual Reconstructions

While this study is concerned specifically with three-dimensional reconstructions, it should be noted that virtual reconstructions philosophically adhere to these five principles more successfully than three-dimensional constructions or two-dimensional representations (Allen 1998; Brown and Chappell 2004; Brush 2004; Daniels-Dwyer 2004; Killebrew 2004). Virtual reconstruction can easily convey multiple and conflicting lines of evidence, as well as where elements are conjectural; they are easily identified as an interpretation and not mistaken for authentic, due in part to their computerized nature; they can be manipulated to illustrate multiple time periods, rather than being forced to interpret a single point of significance and they are easily changed to incorporate new interpretations; and the only destruction to authentic fabric is through excavation necessary to gather evidence. Virtual reconstructions are expensive to produce, can be technologically intimidating, and the use of computerized technology conveys a degree of authority which may not be justified by evidence (Brown and Chappell 2004; Killebrew 2004).
Two-dimensional reconstructions, while sensitive to archaeological remains, are less successful at meeting the first three criteria. While artists can choose a view to minimize focus of unknown or conjectured elements, they are not easily reversed and because they are so accessible, people believe what they see (James 1999, 1996; Noël Hume 1969).

**US National Policy and In Situ Reconstructions**

As the Burra Charter (Australia ICOMOS 1999), the Nara Document on Authenticity (UNESCO 1994), the Declaration of San Antonio (ICOMOS National Committee of the Americas 1996), the Riga Charter (Riga Charter on Authenticity and Historical Reconstruction in Relationship to Cultural Heritage 2000) and the Ename Charter (ICOMOS 2007) discuss, ideas of significance, authenticity, and presentation are cultural constructs. It is useful therefore to look closely at US national policy to discover how these three ideas are reconciled. Besides being culturally unique, reconstruction philosophy is also temporally fluid; therefore, a historical review of US national policy documents the evolution of the theoretical thinking behind reconstructions. National policy provides philosophical guidance to understand when sites might be reconstructed and more pragmatic discussion of how site reconstruction occurs.

**CRM (Cultural Resource Management)**, a bulletin produced by the US National Park Service, has published many articles on federally-sponsored reconstruction projects and the philosophical approach of the national government (Chappell

Additionally, the most recent edited volumes on reconstruction also contain articles detailing the nuances of US national policy (Jameson and Hunt 1999; Macintosh 2004).

How sites are perceived and utilized by both the government and the public is, according to Okamura and Condon (1999: 67), related to the "pursuit for a better quality of life, for increased leisure time...a heightened demand for a more visible past, and ...cultural identity." In the US, this transformation of American society occurred in the period between the World Wars and was directly influential on how historic sites were interpreted and presented. During the 1920s and first half of the 1930s, a plethora of *in situ* reconstructions were undertaken in the US by private organizations (e.g. Colonial Williamsburg, Mount Vernon and George Washington's Birthplace, VA; Fort Necessity, PA), state agencies (e.g. George Washington's Gristmill, VA; Spring Mill, IN), and the federal government (e.g. Morristown National Historical Park, NJ; Aztec Ruins, NM; Mesa Verde, CO). The popularity of, and interest in, these reconstructions influenced the passage of the Historic Sites Act which codified reconstruction as an accepted preservation option (Historic Sites Act 1935; Hosmer 1981; Jameson 2004b; Jameson and Hunt 1999; Mackintosh 2004, 1990; Pitcaithley 1989). Today, nationally the US still considers reconstruction as a preservation treatment for historic structures, which
ties reconstruction to ideas of building restoration and the historic preservation movement (Department of the Interior 1995).

_Historic Sites Act (1935) and the National Park System Advisory Board_

Section 2(f) of the Historic Sites Act (1935) authorized the Secretary of the Interior to "...reconstruct...sites, buildings, objects, and properties of national historical or archaeological significance..." This mandate allowed the National Park Service to develop historical sites within the US and utilize reconstruction as an acceptable method. The Historic Sites Act also endorsed the creation of a board of professionals to advise the National Park Service.

Assembled soon after the passage of the act, the National Park System Advisory Board discussed many of the issues that still surround historic sites and their management today. A position paper authored by Verne Chatelain (1936), the National Park Services's first chief historian and presented to the first Advisory Board Meeting includes a lengthy discussion of the value of physical evidence and how it must be "read" in the same manner as historical documentation. Chatelain also acknowledges that historic sites can have a broad subjective function through conveying a sense of both time and place. For "the layman's point of view contact with the physical site is the quickest and easiest method to the few essential facts of an historical situation" (Chatelain 1936: 7). He also discussed the "popularization" of historic sites and that this had varying effects depending on how much and what was being done. Chatelain acknowledged that visitors were
entitled to interpretation but questioned "has any one the moral right to destroy the scientific data which may have existed at that place before such activity began(?)" (Chatelain 1936: 14).

Acting on Chatelain's suggestion that the federal government, and specifically the Advisory Board, needed to take a strong role in how historic sites should be developed and interpreted, the second meeting of the Advisory Board included a lengthy discussion on the presentation of sites with member, museum director and architectural historian Fiske Kimball suggesting "...we should rebuild destroyed buildings on important historic sites" stating "even the ruins are more interesting, when used in a restoration" (National Park Service 1936: 18).

Drawing upon these discussions, the Board adopted the first national historic preservation policy in 1937, which included limited acceptance of reconstruction (Hosmer 1981: 1005-1012; Jameson and Hunt 1999; Mackintosh 2004: 66 - 67, 1990; Pitcaithley 1989: 10-11; Unrau and Willis 1983). The statement discussed the main conflict in reconstruction philosophy, that of preservation and presentation of the past. It acknowledged the conflicting motives that coexist in presenting the past as "aesthetic, archeological, scientific, and educational" and discussed the demands each motive places on the presentation of the past (Mackintosh 2004; Unrau and Willis 1983). While the Advisory Board's policy was conservative in terms of reconstruction, quoting the statement "better preserve than repair, better repair than restore, better restore than construct" which Kimball
had stated at the May 1936 meeting, it by no means rejected reconstructions
(National Park Service 1936: 18). It left the ultimate decision of what to display at
historic sites up to those in charge of the site.

Jameson and Hunt (1999) state this provided little national guidance for ensuing
debates over reconstructions. Hosmer (1981: 598-99; 1010-1011) and Mackintosh
(2004, 1990: 7-8), suggest that the Board, and this policy, failed to provide more
direction for reconstructions, in part because of two dominant personalities
appointed to the Board. Fiske Kimball was an imposing presence and had broad
experience with both restoration and reconstruction throughout the eastern US. He
was a proponent of reconstruction, with his personal philosophy balancing
"authenticity and beauty." His experience and personality made him a major
figure on the panel (Chappell and Wenger 1995; Farris 1995; Hosmer 1981;
Pitcaithley 1989). Colonel Richard Lieber proved an equally commanding and
vocal member of the board. He recognized the positive role reconstructions
played, having developed a number of parks in Indiana. Lieber, however, viewed
reconstructions as "pious frauds," and opposed all development that hinted at
inaccuracy (Hosmer 1981; Pitcaithley 1989). These two individuals met
philosophically over the issue of authenticity -- that reconstructions served a
purpose as long as the evidence was complete and sound (Hosmer 1981;
Pitcaithley 1989). The idea that quality reconstructions, based on a high degree of
varied evidence, can be a valid addition to tourist venues is a constant that most
restoration and interpretive policies accept. Just as this idea was the meeting point
for Kimball and Lieber on the Park Advisory Board, it serves as a constant across both time and space and is echoed in the international charters.

By the end of the 1930s, the enthusiasm generated by the early reconstructions had faded. The Park Service discovered inaccuracies in a number of their projects, most notably George Washington's Birthplace, VA (e.g. Grand Portage, MN; Morristown, PA). These discoveries coalesced a number of Park Service personnel, led by Chief Historian, Ronald Lee, and, after 1940, the National Park Service director, Newton Drury, to be generally critical of reconstructions (Hosmer 1981: 1011-1012; Pitcaithley 1989: 11-12). This attitude prevailed through World War II, when most development of sites stopped.

National policy did not change during the post-war period (1945-1960), although a number of reconstructions, including some extremely controversial examples (Fort Caroline, FL; Fort Clatsop, OR) were built (Jameson and Hunt 1999: 39; Mackintosh 2004, 1990). Buildings at Appomattox Court House, VA, site of the Civil War surrender, were also reconstructed during this period, based on extensive evidence. This project still unites even the most vocal reconstruction opponents as being justified based upon evidence and the significance of the event within American history (Hosmer 1981; Mackintosh 2004, 1990).
Administrative Policies (1968)

In the mid-1960s the National Park Service published *Administrative Policies for Historical Areas of the National Park System* (Department of the Interior 1968), the first policy on preservation since the 1937 statement. This had three main points for guiding reconstructions: the entire structure should be gone and reconstruction must be necessary "for public understanding and appreciation of the historical associations" significant to the property, the level of data (historical, archaeological, and architectural) is sufficient for accuracy, and "the structure can be erected on the original site, or in a setting appropriate to the significance of the area." A plethora of reconstructions, which were easily justified under the new guiding principles, appeared during the period leading up to America's Bicentennial in 1976 (Fort Stanwix, NY; Bent's Old Fort, CO; Graff House, PA). Jameson and Hunt (1999) argue that the 1968 *Administrative Policy* added restrictions over the 1930's statement although Mackintosh (2004) argues the opposite, suggesting it encouraged not only *in situ* archaeological reconstruction but representational reconstructions based on very little evidence (e.g. the auxiliary structures at Booker T. Washington National Memorial and Turkey Run Farm, VA; Cumberland Gap National Historical Park, KY). Planning for the Bicentennial also fostered development of reconstructions during this period as anniversaries are a common motivator for site development and by extension reconstructions.
Management Policies (1975)

In 1974 and 1975, two documents moved the Park Service to a more conservative position. The first was a memorandum from the Director that cautioned against reconstructions because they took resources away from authentic structures (Jameson and Hunt 1999: 42; Mackintosh 2004: 70-71, 1990). The second, 1975's Management Policies, permitted reconstructions only if there were no "significant, preservable remains that would be obliterated," evidence was sufficient to reconstruct with little conjecture, the "structure can be erected on the original site," and other interpretive alternatives are considered and reconstruction is the only option "essential" for the public comprehension (Department of the Interior 1975).

The 1975 document ended the option of placing reconstructions off-site, which the 1968 policy permitted. It also ended the "representative" or "typical" reconstruction, which was a staple component of many sites. Mackintosh (2004: 71, 1990: 10) states that the framers of this policy knew very few, if any, reconstructions would meet these new criteria, and that it placed "preservation above interpretation." Yet the on-site stipulation had disastrous results for the archaeological resource when sites were reconstructed. The reconstruction of the Fort Union Trading Post in North Dakota (Cronenberger 1992; Hunt 1989; Matzko 2001; Wheaton 2004) is the most famous example of this period. Although archaeological excavations were done at Fort Union, they were not extensive enough, or carried out with adequate funding or time to study the physical remains for evidence or to mitigate the resource.

The anti-reconstruction movement in the Park Service coalesced with 1985's NPS-28, Cultural Resource Management Guideline (Department of the Interior 1998). This policy "does not endorse, support, or encourage the reconstruction of historic structures." It finally presented a nearly impossible criterion that reconstructions must occur on-site yet no remains could be damaged, "regardless of their significance or preservability" (see also Mackintosh 2004: 72, 1990: 10).

This trend was short-lived. In the same year, a new Park Service director, William Penn Mott, immediately reversed policy, in favor of reconstructions for interpretive purposes. Management Policies, revised in 1988, reflected Mott's philosophy. Reconstructions were once again a viable restoration and interpretive alternative. This policy allowed reconstructions when they are "essential" to understand a park, evidence exists to reconstruct on-site with minimal conjecture, and "significant resources are preserved in-situ or their research values will be realized through data recovery," and reconstructions must be identified (Management Policies 1988, quoted in Mackintosh 2004: 72, 1990: 11; Jameson and Hunt 1999: 43).

This manifestation, in essence, made reconstructions easier, by allowing data recovery to "clear" a site of archaeological features. The anti-reconstruction contingent in the Park Service viewed this as a defeat, by allowing the resource to be excavated for political, social, ideological, or economic pressures (Jameson and
Hunt 1999: 43; Mackintosh 1990: 11). This is an example of what Okamura and Condon (1999) view as interpretation of archaeological sites being removed from the authority of the archaeologist. The compromise, recovery of information through data recovery, is not justification to destroy historic fabric (Weeks 1994).

**Current NPS Policy**

Today, the existing *Management Policies* (Department of the Interior 2001: 55) views reconstruction as a "treatment of historic structures and cultural landscapes" and not routinely undertaken. However, they are permissible as long as the archaeological data are recovered, a process known in the US as mitigation, and when they are rebuilt in their original location (see also Mackintosh 2004: 73).

The current US standard and guideline for the treatment of historic properties, *Secretary of the Interior's Standards for the Treatment of Historic Properties* (Department of the Interior 1995) views reconstruction, along with restoration and preservation, as valid options. The standards stipulate documentary and archaeological investigation to gather evidence, archaeological mitigation so remains are not destroyed, use of "minimal conjecture," and identification as a modern construction. In terms of the completed structure, the document suggests that interpretation of a particular period of significance is generally best, and visible interiors and exteriors should be as accurate as possible. In conclusion, the document states that reconstruction, as an option, can be "justified only rarely and,
thus, is the least frequently undertaken." This statement is often misconstrued that reconstructions are not allowed under the guidelines, which is clearly not the case.

In conclusion, the US NPS policy, as reflected from 1935 through the present, evolved from pro-reconstruction, grew increasingly conservative, became more permissive, and currently allows reconstructions with stipulations. The evolution of this policy reflects the influence of individual personalities, as well as restoration and interpretive philosophy at private historic sites, specifically Colonial Williamsburg. Throughout this history, the need for evidence, and enough to leave no doubt about construction details, emerges as a constant theme. As discussed in Chapter Three the federal designation of reconstruction as a preservation tool is important because it is a major factor influencing the use of in situ versus ex situ reconstructions in America. A brief review of Canadian and British national policies clarifies this position and how it influences reconstructions.

**Canadian Policy and In Situ Reconstructions**

The establishment of reconstruction as a preservation treatment is an anomaly of US national policy. Canada's *Standards and Guidelines for the Conservation of Historic Places in Canada* (Parks Canada 2003: 2) specifically states that reconstruction is not "considered conservation and therefore not addressed in this document" while building restoration treatments are detailed. This view is similar to what Ruskin and his compatriots argued in the 19th century, reconstruction
should not be viewed as a preservation tool for historic structures and sites, but as an interpretive device because it almost always utilizes a degree of conjecture or interpretation of data.

Reconstruction is addressed as part of Canada's cultural resource management policy, *Parks Canada Guiding Principles and Operational Policies* (Parks Canada 1994). This document views reconstructions as interpretive devices. As stipulated in section 3.5.2.6.3, reconstructions are allowed on Canadian historical sites when necessary to "create a sense of the past." This concept is viewed as a specific interpretive option (see also Cameron 2000). Canadian reconstructions must make a "significant contribution to historical, scientific, or technical knowledge" and the cost of construction and continued maintenance must be justified. Archaeological remains must not be threatened, the "commemorative integrity" of the site cannot be in danger through introduction of new construction, and conjecture should be avoided for reconstructions to occur on Canadian sites. Finally, this document states that reconstructions are modern and have no historical value.

Fifteen years ago, the Canadian Parks Service (1993) published the proceedings of a reconstruction workshop held to open the dialogue about reconstructions and their use and maintenance in Canada. In her remarks, Christina Cameron (1993), the senior Parks Canada heritage executive, summed up the workshop's key question, "When is reconstruction an appropriate and necessary interpretive tool?" This document specifically concerns reconstructions in Canada although there are
a number of papers by US National Park Service employees to provide context and background for the Canadian studies. Two of these articles were subsequently also published in *CRM* (Bennett 1992; Ricketts 1992).

Practically, Canada has employed reconstructions in a similar fashion to the US, for educational, economic and interpretive reasons, with experimental reconstructions utilized to a lesser degree. Reconstructions began to be popular during the 1930s influenced by the success of Colonial Williamsburg. The extensive reconstruction of Louisbourg in Nova Scotia rivals the Virginia site in terms of scale and scientific methods used to craft the buildings. As in the US, Canadian heritage sites continue to maintain reconstructions although official policy does not support their creation except in exceptional cases (Canadian Parks Service 1993; Cullen 1992; Fortier 1983; Fry 2004, 1969; Kell 1991; Krause 1987; Naftel 1993; O'Shea 1993; Parks Canada 2003, 1994; Ricketts 1992; Seaman 1995; Stovel 1996; Taylor 1993; Watson 1993).

**British Policy and In Situ Reconstructions**

While US policy defines reconstruction as a preservation device and Canada policy views it as an interpretive option, Britain has historically maintained a bias against *in situ* reconstruction. Today, some authors perceive an emerging shift in British presentation philosophy away from the conservative base of John Ruskin, William Morris and the writings of the Society for the Protection of Ancient

Reconstructions are not a new concept in Britain. *Ex situ* reconstructions, for educational, experimental, interpretive and economic motives, have been built for years. Within the last 30 years, however, a number of *in situ* archaeological reconstructions opened showcasing people not traditionally interpreted, whose heritage lacks extant architecture (e.g. Castell Henllys in Pembrokeshire; bottle kiln at Coalport, Ironbridge Gorge, Shropshire; Stansted Mountfitchet Castle, Essex; Arbeia Roman Fort, South Shields; West Stow County Park, Suffolk; Cosmeston Medieval Village, Vale of Glamorgan) (Blockley 2004, 1999; Council for British Archaeology n.d.; Dixon and Kennedy 2000; Mytum 2004). The rise of *in situ* reconstructions, especially those depicting cultures and people without extant architectural examples parallels similar reconstructions in the US, whose roots are in the social history school of the last 50 years (e.g. numerous slave quarter reconstructions at sites such as Poplar Forest, Carter's Grove, or Sully Plantation, VA) (Brown and Chappell 2004; Chappell 1992; Handler and Gable 1997; Hill 2001; Lawson 1995). The impetus for this evolution towards increased *in situ* reconstruction in the UK is also felt to be related to the rise in heritage tourism, increases in leisure time and the demands the public places on sites. (Blockley 1999; Dixon and Kennedy 2000; Fowler 1992; Grenville 2006; James 1999; McManamon 2001; Merriman 1991; Wheaton 1992).
The evolution in thinking about British reconstructions is outlined in a recent assessment of a proposed reconstruction on the island of Jersey (Dixon and Kennedy 2000), an overview of interpretation on Roman sites in both the UK and Germany (Rowehl 2003), and a paper published in a volume guiding Korean reconstruction policy (Grenville 2006). To provide context, these authors assess recent reconstructions. The Dixon and Kennedy (2000) report also presents documentation from various English Heritage personnel regarding reconstructions. Glyn Coppack (Dixon and Kennedy 2000: 64-65) describes the current transformation of British theory, "Although a building might currently exist in a ruined state, it is no longer considered essential that it stays forever a ruin... Visitors to ancient monuments expect buildings they can understand and appreciate."

Professor Jane Grenville (2006: 92) concurs that the UK is developing a "softer line on the matter of reconstructions" begun with the reconstruction of the gateway at South Shields. The Burra Charter (Australia ICOMOS 1999) was influential in creating a shift in how heritage sites are evaluated. Traditional values, such as the ability of a site to yield scientific data, the aesthetic of ruins or architecture, or historic fabric which are primarily prized by academics, are now evaluated along with economic, educational and social goals important to a wider audience. This shift in values and the demands upon sites by the increase in heritage tourism have caused an increase in the constituencies who place values upon historical sites and how these diverse values are assessed. Grenville (2006) and Mason, MacLean,
and de la Torre (2003), credit the rise in values-based approaches to site management as influential in the yielding of British policy concerning reconstructions over the last two decades.

English Heritage (2001a), the public body responsible for the historic environment, has responded to this shift with a Policy Statement providing direction on proposed reconstructions. Stressing a "cautious" approach to reconstructions, the document acknowledges that "very strong arguments are made for the recreation of buildings or structures...for education or tourism, or to generate revenue...this should not be achieved at the expense of original fabric or significance, or with the loss of the evidential quality of the site (paragraph 29). This document relies heavily on four international policies, the Venice Charter (Second International Congress of Architects and Technicians of Historic Monuments 1964), Lausanne Charter (ICCOMOS 1990), Riga Charter on Authenticity and Historical Reconstruction in Relationship to Cultural Heritage (2000), and the Nara Document (UNESCO 1994), for guidance and precedent. Its conservative tone follows these international policies by stipulating the importance of fabric and the archaeological record. However, in "certain exceptional cases, very strong arguments are made for the recreation of buildings or structures" for education, tourism and revenue (paragraph 29). These reconstructions will be approved if proposals address the impact of the reconstruction on both the site and larger setting, alternatives to reconstruction are considered, and site significance is
maintained. Reconstructions should be identified and easily reversible, both tenets of the international policies.

The impact of the English Heritage Policy Statement is evident in documents such as the Hadrian's Wall Management Plan (English Heritage 2001b) which tacitly acknowledges the educational impact of reconstructions, including those already in place. This document accepts well-planned _ex situ_ replicas and cautions against a reliance on _in situ_ reconstructions as a potential threat to the authenticity of fabric and workmanship at the site.

**Conclusion to International and National Policies and In Situ Reconstruction**

This review of the international policies, the history of US policy and current Canadian and English policies, illustrates that philosophically three-dimensional, _in situ_ reconstructions are never espoused as the interpretive method of choice yet also reveals that there is not a concerted vehement opposition to the actual creation of reconstructions. There appears instead, an understanding that in some situations _in situ_ reconstructions are used to interpret sites. When _in situ_ reconstructions do occur, international policies agree upon five caveats, echoed by both the British and Canadian national policies; all five of these principles are not however reflected in current US national policy. Chapter Three addresses this difference and attempts to discover why US policy fails to embrace these five tenets through an examination of the history of preservation in the US and the national emphasis on _in situ_ interpretation.
Why Reconstruct?

The motivation behind the construction of reconstructions is the final broad theme within the reconstruction literature. Why do historic sites choose to reconstruct non-extant features and buildings either in situ or ex situ? Many of the details about specific reconstructions are within site reports, journals and edited volumes and present pragmatic site-specific examples rather than explorations of motivation or theory behind the decision to reconstruct (e.g. Beamon 2000; Clauser 1985; Fortier 1983; Fry 1969; Gilmore, Moyer and Alblinger 2001; Harrington 2003; Jeffery 2001; Kell 1991; Krause 1993, 1987; Lounsbury 1990; McCune 2001; Morris 1999; Pogue 1994, 1988; Pogue and White 2005; Pogue, White and Leeson 2002; Russell and Woodall 1998; Samford 1988; Seaman 1995; Takashina 1996; Turi 2001; White and Leeson 1999).

Two recent books explore the motivations behind the creation of three-dimensional representations of archaeological sites (Jameson 2004a; Stone and Planel 1999a). These are compilations derived from academic conferences, and present case studies from many countries and a variety of reconstruction methods. The editors state that the recent increase in reconstructions warrants examination. Stone and Planel's (1999b: xix) interest in reconstructions commenced due to concern over their increase and the message these sites present in terms of education and presentation. Their volume does not address in situ construction, feeling it is in violation of the Lausanne Charter (ICOMOS 1990; Stone and Planel 1999: 3). Yet many of the chapters deal specifically with this type of
reconstruction, including reviews of US policy, Colonial Williamsburg, and Japanese policy (Jameson and Hunt 1999; Mytum 1999; Noël Hume 1999; Okmura and Condon 1999). The authors in this volume feel that reconstructions should occur because of their positive benefits for education and interpretation and the bulk of the chapters detail ex situ reconstructions undertaken for educational motives. Alternatives to physical reconstructions are not addressed in this volume, in part because the authors and editors are very supportive towards the ex situ use of reconstructions.

Archaeologist John Jameson's (2004a) volume is also concerned with the explosion of reconstructions globally. It addresses the theory, ethics and practice of in situ reconstructions and explores the motivation behind the creation of these sites. The authors in this volume, archaeologists and historians, are, like Stone and Planel (1999a), generally resigned that some form of reconstruction will occur due to the demands of heritage tourism. They are not, however, as universally positive that the type of reconstruction this volume addresses, in situ reconstruction, should occur.

Jameson (1999b: 1) succinctly points out the ethical conflict embedded in the relationship between archaeologists' role in pursuing research and developing reconstructions, both in terms of employment and in the destructive nature of constructing in situ reconstructions. These authors recognize that archaeologists are rarely responsible for decisions in how sites are presented yet archaeologists
are called upon to shape reconstructions after the decision to rebuild is made. Archaeologist Vergil Noble (2004: 276), who has fashioned a career working on NPS reconstructions, notes that "the true driving forces behind site reconstruction are ultimately economic, political, or social, and simple entertainment of site visitors is often deemed more important than education as long as it gets them through the front gate."

Building upon Noble's assessment, Stone and Planell (1999b: 4-5) identify three reasons why sites are reconstructed: archaeological experimentation, education, and presentation. They lump a number of motivations within presentation which Blockley (1999) suggests are separate incentives: interpretation, tourism development (economic motivations), and local/cultural identity. Because so many of the reconstructions in the US employ these justifications, this study explores each separately to better understand the nuances between these motivations. Reconstructed sites rarely exist because of a single mission, and more often decisions to reconstruct are based upon multiple factors or quickly grow to include multiple focuses.

Experimentation

Very few historic sites in the US are reconstructed for experimental motives; however in Britain and Western Europe this type of reconstruction is often undertaken. The main purpose in an experimental reconstruction is recovering data about the process of construction rather than the end product. For this reason,
experimental reconstructions often utilize period tools and craftsmanship. These venues explore construction techniques, feature creation, rates and effects of decay and weathering upon structures, and structural layout, among other hypotheses (Drury 1982; Reynolds 1999a, 1999b; Smith 1982).

Stone and Planel (1999b: 5), whose volume includes several examples of experimental sites, suggest that most experimental sites also have an educational mission as well. They know of "no site that manages to survive solely for archaeological experimentation." This is probably due, at least in part, to funding requirements, visitors and school groups, while diluting the purely scientific motive of the reconstruction, help pay expenses.

Sites where archaeological experimentation is an ongoing pursuit also provide the visitor with a more engaging visit than a site that offers only a static image of life inside a reconstruction. Archaeological experimentation is not the only way to actively engage the visitor, living history can also provide a dynamic backdrop, but Stone and Planel (1999b: 7) have a valid point that the visible pursuit of archaeological experimentation makes visitors aware "that the sites are experimental, and that they are not definitive models of what it was like in the past."

Scientific sites, such as Butser Ancient Farm, created by Peter Reynolds (1999a, 1999b) or Lejre, Denmark (Rasmussen and Grønnow 1999) are almost always
constructed ex situ, often replicating buildings from a number of archaeological sites. Experimental sites are the most likely type of reconstruction to have an archaeologist as the key decision maker and this is one reason that these are often reconstructed ex situ. It is assumed that archaeologists have a high regard for the archaeological record and historic fabric.

Two notable exceptions are Castell Henllys in Wales and West Stow, Suffolk both experimental and educational in situ reconstructions (Blockley 1999; Mytum 2004, 1999; Pearce 1990). Industrialist Hugh Foster developed Castell Henllys and began the reconstruction project initially as a private enterprise. Foster's work relied upon archaeologically derived evidence and excavation prior to construction but he was not an archaeologist and this influenced the onsite placement of the reconstructions (Mytum 2004, 1999). West Stow was completely excavated over several years prior to the reconstructions. The large scale excavation and in situ nature of its reconstruction is not typical for this type of European site (Blockley 1999: 17).

In researching her dissertation on presentation at Bronze and Iron Age European archaeological sites, Clara Esquerra (2007) found that European archaeologists highly value experimental archaeology and the public enjoys active sites. Therefore experimentation is usually a key justification for the creation of ex situ sites. She also discovered that the economic pressure to attract visitors to these sites is extremely strong and often what are essentially exhibits are marketed as
experimental archaeology. The result is that many sites across Europe display a very homogenous view of the Bronze and Iron Age leading to distrust and lack of credibility at many of these sites. Her research was limited but raises questions about experimental sites from different periods.

Although there are not specific sites devoted to experiment and research in the US, some experimental archaeological reconstructions have been constructed (e.g. Plymouth Plantation, MA; Jamestown APVA, Jamestown Settlement, Carter's Grove Slave Quarter, VA; St. Mary's City, MD; Cahokia Mounds, IL) (Brown and Chappell 2004; Chappell 1992; Iseminger 1997; Miller 2007). American archaeologists conduct experimentation more often into prehistoric sites and culture than historical archaeology (Iseminger 1997).

American archaeologist William Kelso constructed a slave cabin and burned it down to analyze spatial distribution of the nails to see if they were similar to archaeological distributions observed at slave quarters at Virginia plantations, specifically Monticello. Kelso's replica was created solely for the purpose of experimentation and was not carried out in a public manner although it was filmed for the BBC production Digging for Slaves (BBC-TV 1993). The pure research aspect of reconstructions is not routinely undertaken in the US at public historic sites partly because the cost of three-dimensional reconstruction is very high and archaeologists are rarely employed as institutional decision makers at heritage sites (Jameson 2004a, 1997; Miller 2007; Noble 2004).
Almost all reconstructions that welcome visitors have an educational mission; most combine this mission with other motives such as experimentation (e.g. Brown and Chappell 2004; Mytum 2004, 1999; Reynolds 1999a, 1999b). Some, such as the Ancient Technology Centre in Cranborne, Dorset were constructed with an educational mission and combine teaching with experimental archaeology (Keen 1999). Other reconstruction sites such as Butser Ancient Farm have added education to their mission because this can be an important marketing and financial tool (Reynolds 1999b).

Educational reconstructions often include a living history component to engage visitors, especially school groups but are not constructed with period tools unless there is also a strong experimental mission (Blockley 1999: 17-18; Stone and Planel 1999b). Materials can vary greatly on educational sites and are often related to the degree professionals with an understanding of these issues are involved in their construction, as well as financial and practical constraints (Okamura and Condon 1999: 63).

Educational reconstructions are built both in situ and ex situ; the ex situ sites are not always drawn from particular archaeological examples. Many do try to replicate a particular site plan or building, but representational and generic buildings are just as likely to be constructed as are multiple buildings from many different time periods, especially in open-air museums.
School groups translate into a regular paying audience and this visitation can be important to budgets as well as being favored by funding agencies and foundations but educational reconstructions do not have to work only with youth. They are just as likely to program for adults or include other didactic means of programming to educate visitors about the past.

*Interpretation*

Reconstructions with an interpretive mission are typical tourist attractions seeking to provide physical illustration for people, architectural features, building types or other landscape elements that lack extant remains. Reconstructed interpretive examples include prehistoric societies, post-in-ground construction or enslaved African American life in the US (Robles Garcia 2000; Hill 2001; Jameson 2004a, 1997; Stone and Planel 1999a). Interpretive reconstructions are very similar to the educational model discussed above and many interpretive reconstructions in the US are built *in situ* to focus upon location, setting, feeling, and place as keys to their interpretive mission and authenticity.

The majority of US reconstructions are done for interpretive purposes and this motive is closely tied to the informal type of education undertaken at many reconstructions. The impermanent nature of the archaeological heritage is one of the main reasons that sites began to be reconstructed and are still reconstructed today. Many significant sites are invisible upon the landscape and without extensive restoration or reconstruction the portrayal of the past is difficult (Brown
and Chappell 2004; Cameron 2000; Canadian Parks Service 1993; Chappell 1992; Morris 1999; Mytum 1999; Okamura and Condon 1999; Wheaton 1992). Even when archaeological sites are visible, their ruins are difficult to comprehend. As NPS archaeologist Francis P. McManamon stated in a recent issue of Common Ground (2001),

Rarely are archeological data instantly understandable to the untrained. Archeological sites, more often than not, are invisible or difficult to discern; they frequently resemble jumbles of stone rather than camps, villages, towns, or cities where human beings lived, played, and worked. Archeological techniques—and interpretations based upon them—usually need some translation to be understood by one and all.

At many sites, where original structures are the focal point, alternative methods of presentation such as stabilized ruins, or incomplete ghost structures, are in opposition to the overall vision or plan for the site. Their presence or construction presents an anomaly upon the landscape. This anomaly is due, at least in part, to the incomplete interpretation often presented with ruins, and the difficulty the public has in interpreting ruins (Baker 1999; Esquerra 2007; Fowler 1992; Fry 1992). This becomes more difficult when there is an easily understood, and better interpreted, structure in close proximity (Hill 2001; Pogue, White, and Leeson 2002; Wheaton 1992). In cases such as these, many authors do not define the infilling of missing structures or elements within an otherwise intact cultural landscape as reconstruction, but rather restoration, easily maintaining a homogenous presentation method. Notions of context and authenticity are defined upon a
definition of the whole rather than from individual elements (Jeffrey 2001; Mackintosh 1992; Miri 2001; Weeks 1994).

Presentation method also has important ramifications upon interpretation and when methods are combined this can influence both visitor comprehension and experience. Visitors to historic sites experience the site in a variety of ways and for a variety of reasons. Because they impart their own meanings upon the site they are capable of experiencing the site individually and do not necessarily need to comprehend each element in the same way, or have it interpreted in the same method (Bruner 1994; Leone and Potter 1988a, 1988b; Leone, Potter and Shackel 1987; Lowenthal 1985). This notion is fine for a site comprised of one type of presentation (i.e. ruins), but when ruins are juxtaposed with more complete and therefore comprehensible methods (i.e. standing structures), the result is more emphasis is placed on the interpretation of the structure at the expense of the ruin (Heath 1997; Hill 2001; Miller 2007). This concept of how interpretive method dictates the interpretation is explored throughout this study.

Reconstruction is just one presentation method that can be used to sort out the "jumbles of stones." Henry Miller (2007), the Director of Research at St. Mary's City in Maryland, recently published a review of presentation methods employed to interpret the first permanent English settlement in Maryland. The character of individual presentation methods are explored in the next chapter, but Miller (2007: 44) summarizes reconstruction as "the most popular, demanding and costly exhibit
approach." Miller, while stressing that the archaeological remains and a number of additional factors should influence the chosen presentation method of non-extant sites, acknowledges that certain techniques are more readily understood by the visitor. The ease by which visitors can comprehend three-dimensional reconstructions is the main reason their popularity continues.

Archaeologist Clara Masriera i Esquerra's dissertation (2007) compared the interpretive potential of reconstructed Bronze and Iron Age sites in Spain with similar sites presented as ruins. She found that all visitors to reconstructed sites learn something while people who visited ruins were likely to leave understanding less than when they started. She attributes this to the complexity of understanding ruins and the ease at which reconstructions are interpreted by the public. Her work is significant in terms of interpretation at archaeological sites and also educational potential within decisions on how the past is presented and best marketed.

Esquerra's study (2007) reinforced a number of assumptions between visitors to ruins versus reconstructions. She found that typical visitors to reconstructed sites are less educated than those who choose to visit ruins. She equates the visit to a ruin as conferring a type of "social prestige" and this same highly educated segment of the population views reconstructions as "childish" and therefore not as worthy of their time.
The difference in demographics between visitors to ruins versus reconstructions is reinforced in a "prestige" conferred upon visitors to ruins, Esquerra found. Visits to ruins, Esquerra reports, become a "badge of exclusivity," a phenomenon not found in visits to reconstructed sites. This cachet is similar to arguments that heritage professionals oppose reconstructions to maintain their cultural capital of decoding archaeological sites.

The literature on reconstruction supports the hypothesis that the professional resistance to reconstruction is based in part on a desire to maintain cultural capital. The most vehement critics of reconstructions are archaeologists and preservation professionals who prefer to see sites maintained as ruins or invisible upon the landscape, thereby maintaining their power to read and comprehend the past (Huey 1990; Mackintosh 1992; Pitcaithly 1989; Sellers and Pitcaithley 1979; Stone and Planel 1999b: 7; Whitehill 1966).

Archaeologists who are more positively disposed towards reconstructions are typically those who have spent many years pursuing public archaeology and education through the use of archaeological sites and artifacts (Blockley 1999; Heath 1997; Hill 2001; Jameson 2004a; 1997; Mytum 2004, 1999; Stone and Planel 1999a; Wheaton 1992). It must be noted that in situ reconstructions, because of their potential for damage to authentic fabric are almost universally opposed by professional archaeologists. While this might be related to a desire to
maintain control over understanding the past it is more about the negative impact this approach has upon the resource.

Historic site administrators, who have a different mission than archaeologists, rightly perceive that the visual potential of reconstructions relates to visitor potential (Stone and Planel 1999b: 7). Overwhelmingly, public preference is the reason given for the plethora of reconstructions (Hill 2001; Jameson 2004a; McCune 2001; Miller 2007; Noble 2004; Noël Hume 1999; Stone and Planel 1999a). Historian Barry Mackintosh (Lee 2000: 28), a longtime opponent of reconstruction, summed up the perceived public position on reconstructions during an interview as he left the National Park Service, "I suspect that the public generally is less concerned about these issues of authenticity and accuracy than are cultural resource professionals. The public does not necessarily mind or object to reconstructions as such."

Economic Development

_In situ_ reconstructions undertaken primarily for economic development can be one of the most detrimental to the archaeological record because when economic reconstructions are undertaken the decisions are almost always made by politicians and not archaeologists. There are two main reasons that reconstructions are undertaken for an economic justification: to stimulate the economy by providing jobs to local citizens and to create a tourist destination to provide the money and benefits that visitors bring to a community. While not all economic
reconstructions are built in situ the majority are, because location, association, place and setting are such key elements of authenticity and this is one of the most important factors in a viable tourist destination.

Politicians are often influenced by local constituents to mandate reconstructions hoping to create economic benefits. Fort Union, ND was such a project where years of public lobbying were finally successful when Congress mandated funding for a complete reconstruction (Cronenberger 1992; Hunt 1989; Matzko 2001; Wheaton 2004). Likewise the reconstruction of the Canadian Fort Louisbourg, Nova Scotia was undertaken to provide employment for locals and attract visitation (Kell 1991). The controversial Arbeia Gateway at South Shields is another example of an in situ reconstruction with a partial economic motivation as are Monte Alban, Oaxaca; Poplar Forest, VA; and presumably many other sites whose economic motivations are not acknowledged in the literature (Blockley 1999; Heath 1997; Robles Garcia 2000).

Blockley (1999: 19) states it is possible in the desire to create tourist destinations that "bizarre compromises occur in a schizophrenic attempt to provide a popular visitor attraction and an authentic reconstruction of past society." Her example is Blists Hill where authentic remains and relocated buildings have little theme. Carter's Grove, developed by Colonial Williamsburg and now closed, was another example where the decisions to interpret the past were confused. Colonial Williamsburg's attempt to develop and interpret the donated property was
motivated by both an economic desire to increase visitation and also interpret an outlying plantation. The result created a site with four centuries of story and a variety of interpretive methods and was ultimately not successful (Brown and Chappell 2004; Chappell 1992; Handler and Gable 1997; Lawson 1995; Noël Hume 1999, 1979).

**Local / Cultural Identity**

Finally, sites are reconstructed to provide a sense of local or national identity or cultural pride. This type of reconstruction occurs both *in situ* and *ex situ* although in Western Europe the majority of these sites are constructed away from their original locations in newly created locations which can combine buildings often in open-air museums where authentic structures are mixed with reconstructions or locations that are more accessible to visitation. Visitors seeing and experiencing these reconstructions is the point to this type of reconstruction.

Concern over the political use of reconstructions was one of the reasons *The Constructed Past* was published (Stone and Planel 1999). Because of the complete three-dimensional aspect to reconstructions they are often mistaken for authentic structures and this real image is a powerful tool in presenting information about the past. Reconstructions aid in the creation and immediate significance of traditions and values which are important in establishing identity and pride (Blockley 1999; Culleton 1999; Mytum 2004, 1999; Schmidt 1999).
Understanding the many motivations used to justify reconstructions is important in providing a foundation to assess both built and planned reconstructions. Some of the motivations are overtly political while others are more altruistic but they all contribute to setting the goals of the building. Rationalizations for constructing a building based upon archaeologically-derived evidence, especially when this construction will significantly impact the authentic resource and landscape, are better evaluated when the entire universe is explicit. While these motivations are for building reconstructions, understanding why people visit reconstructions and how they view them is the final segment of the literature review.

The Public

Four studies (Bruner 1994; Esquerra 2007; Rosenzweig and Thelen 1998; Rowehl 2003) elaborate on how the public experiences reconstructed sites and the public's response to this presentation technique. Clara Masriera i Esquerra's research (2007) was discussed showing the importance of reconstructions in providing an educational experience for visitors and in characterizing the demographics of visitors to reconstructions in contrast to those who visit unreconstructed archaeological sites. But this research is from a very didactic point of view and failed to discuss the leisure and entertainment aspects which are part of a visit to a reconstructed site.

For several years during the 1980s and 1990s, Edward Bruner (1994) studied the reconstructed village of New Salem, the Illinois town where American president
Abraham Lincoln lived as a young man. His anthropological ethnographic study had a number of objectives including an exploration of authenticity at reconstructed tourist sites and how tourists themselves continually define authenticity at these sites. His constructivist position favors abandoning the idea of original and reconstruction because visitors during the process of touring construct their own meanings and visually understand the site as an original, authentic entity. Bruner posits that this process is vital to the tourist and many do not want or acknowledge information on replication, other than as a means to strengthen their own perception of the past.

The idea that the reconstruction needs to be identified or the process of creating the reconstruction conveyed is one way that those in control are able to maintain their authority as the experts who know or understand what the past was like. Bruner (1994) argues that this is not necessary for the visitor to experience, enjoy and create their individual meanings at historic sites.

Two surveys (Rosenzweig and Thelen 1998; Rowehl 2003) confirm Bruner's constructivist view and help illuminate why reconstructions are a popular means of interpretation. Rosenzweig and Thelen's (1998: 105-106) work examining how Americans utilize and think about history suggests that they enjoy historic sites and place great trust in these venues in the presentation of the past. Respondents felt that historical sites provided "personal participation" in the past as well as deepening present-day relationships while visiting sites with friends and family.
Jaane Rowehl (2003) conducted an evaluation of reconstructions or "interpretive simulations" for the British National Trust. She assessed reactions to Roman reconstructions in Germany and England and made recommendations about their suitability at a number of English sites. Rowehl discovered that most visitors highly prize the "intellectual accessibility of interpretative simulations" (Rowehl 2003: 19). Her study found that visitors do not retain information about the reconstruction process when it is presented via on-site text panels. In England only 42% of visitors recalled seeing panels and of these only 36% recalled the presented details. The figures were only slightly higher for German sites (Rowehl 2003: 17). Visitors overwhelmingly believed the accuracy of the reconstructions, or trusted what they viewed upon the landscape, and found these reconstructions incredibly helpful in their comprehension of Roman sites.

Rosenweig and Thelen (1998: 105-108) found a similar high level of trust in historical sites and museums during their survey. Respondents repeatedly ranked these venues a 9 or 10 on a 10-point trustworthiness scale. Participants consistently mentioned that when history is experienced at historical sites no one has interpreted it and therefore "you can come to some conclusions on your own" and overwhelmingly mention how these sites provide "a moment from the past almost as it had originally been experienced." Although not addressing reconstructions specifically, this survey suggests that the visitor is not aware of the degree to which choices are part of every historical site and the level with which the site is subject to interpretation in the presentation of the past. It also suggests
that the visitors do not necessarily want more information about the creation of the
historical site, preferring to interpret it, as Bruner (1994) suggests, through their
own experience.

Only 10% of those surveyed by Rowehl (2003: 31) did not view reconstructions as
a serious technique. The primary reason given for this small percentage not
accepting reconstructions was their familiarity with interpretive media. They felt
the method is too trivial and they question the accuracy of the construction,
especially at the expense of the original. She stresses, "It is important to take these
reservations seriously by offering honest discourse about the methods and
techniques used to elevate simulations to efficient learning tools." The intellectual
accessibility "accounts for the incompetence of simulations to provide difficult and
elitist learning material. Some people wish to be challenged physically and
mentally in return for 'cultural capital', or the feeling that they have achieved
something that improves their status in society. Respectively, simulations might
be considered too much fun, and too easily understandable by everyone to
differentiate the successful user as 'special'. Visitors who aim to increase their
'cultural capital' are, thus, alienated by the use of interpretive simulations because
they do not provide the expected service" (Rowehl 2003: 31-32).

Esquerra (2007) also found that visitors with more education did not find
reconstructions to be intellectually stimulating. Her study shows greater
dissatisfaction with reconstructions than Rowehl's (2003) because Rowehl only
surveyed visitors at reconstructed sites whereas Esquerra queried visitors to ruins, a venue visited by this subgroup. At any rate, the significance to both these surveys is that better educated visitors, much like the archaeological professional, prefer to view the visible past in less complete form. This reinforces their cultural capital in being able to understand and decipher the past in ways that the greater population cannot. This idea was influential in the transformation of US historic sites in the early 20th century and is discussed in the next chapter.

Assessing Reconstructions

As this review suggests there is some literature discussing motivations for reconstructing sites and providing broad principles to follow during the process of reconstruction. There is very little literature exploring the entire history of specific reconstructions from research and discussion of how to interpret non-extant features through utilization of the constructed building. Likewise there is a gap in the literature about how to analyze reconstructions or compare existing reconstructions to gain an understanding if there are factors which are important for success and those which create less successful entities. What does exist is focused upon visitor reaction and expectation rather than for professionals and administrators who manage, plan and build reconstructions.

Four reports assess reconstructions and visitors' perception of them: Dixon and Kennedy (2000) look at a number of sites in the UK; Esquerra (2007) and Rowehl (2003) both conducted visitor surveys. Esquerra (2007) compared visitor
experiences to reconstructions and ruins at Bronze and Iron Age sites in Spain; Rowehl studied Roman reconstructions in the UK and Germany. Hill (2001) looked at reconstructed Virginia (US) slave quarters to help guide interpretation at Monticello, Thomas Jefferson's home. All authors conclude that reconstructions are a powerful tool both for interpretation and education at tourist sites and agree that certain reconstructions when well executed, present a remarkable opportunity for conveying a three-dimensional aspect to the understanding of the past. The works do not dwell on the motivation or stories behind the reconstructions, other than for interpretative purposes.

These four studies are very positive in their assessment of reconstructions and their presence at heritage sites and do not discuss in detail the impact the buildings had on the archaeological resource. Both Hill (2001) and Dixon and Kennedy (2000) critically assess reconstructions for a heritage professional audience. Hill interviewed a number of archaeologists involved in reconstructing slave quarters and they all present a very pro-reconstruction stance. In this study, archaeological excavation is viewed as a means to recover evidence and its use as a mitigation tool prior to reconstruction is not addressed. Dixon and Kennedy viewed a number of reconstructions but their analysis lacks depth and does not include discussion of why some reconstructions are less successful than others. It is hypothesized that to truly understand and critically analyze both the success as well as shortcomings of a reconstruction one must view the story behind a reconstruction in detail. By only briefly looking at how reconstructions are
utilized in the present one misses the story of their creation. I feel this critical
history, including such items as what evidence was available, how evidence was
analyzed, what the goal of the project was, and how issues were reconciled, is
important in assessing a reconstruction's creation and use as well as a
comprehensive way to critique if a structure is achieving its potential.

The idea that the entire history of a reconstruction must be viewed and analyzed in
understanding how it presently functions is based upon what archaeologists Chris
Gosden and Yvonne Marshall (1999) call "cultural biography." Their idea that "as
people and objects gather time, movement and change, they are constantly
transformed, and these transformations of person and object are tied up with each
other" is pertinent to reconstructions because to critically assess a reconstruction,
the entire history of the site should be examined to fully understand significance,
motivation, evidence and the meaning behind the reconstruction (Gosden and
Marshall 1999: 169). To view an object at only one point in time misses the
significance that "derives from the persons and events to which it is connected"
throughout its life (Gosden and Marshall 1999: 170). Without this breadth and
depth, the reconstructions we view almost always appear historical, valid and
authentic entities. When their stories are plumbed, their true identities are placed
into perspective.
The Goal of this Study

Architectural critic Ada Louise Huxtable (1997) calls the term "authentic reproduction" an oxymoron and argues an authentic reproduction cannot exist. Yet, some reconstructions are successful and convey a powerful sense of the past and are utilized as effective stages for the interpretation of history. A number of authors (Dixon and Kennedy 2000; Hill 2001; Jameson 2004a; McCune 2001; Pogue, White, and Leeson 2002; Stone and Planel 1999a; Wheaton 1992) reconcile the positive impact upon both education and interpretation at historical sites as outweighing the negative impacts and misleading nature of reconstructions, WHEN the reconstruction is carried out to exceptionally high standards.

Through an historical exploration and contemporary analysis of the cultural biographies of reconstructions associated with George Washington, this dissertation explores the nature, function and creation of in situ, archaeologically based, three-dimensional reconstructions and analyzes what constitutes "exceptionally high standards." It seeks to understand from the institutional and professional perspectives what elements make a good reconstruction and why some reconstructions are not as successful. Archaeologist Eric Krause (1993) suggests when assessing reconstructions that historic preservation professionals and archaeologists "are incapable of measuring and declaring how wrong or how right we really are." Without this ability we cannot understand the nature, function and use of in situ historical reconstructions in the US and we cannot begin to make
decisions concerning the maintenance or creation of this presentation methodology. This study explores methods by which archaeologists, site managers, preservationists and administrators can be better stewards of their cultural resources and less likely to create ill-conceived and poorly-interpreted buildings at the expense of their authentic archaeological resource.
Chapter Three: Understanding the Origins and Significance of In Situ Interpretation and the Choice of Reconstruction as the Method of Interpretation

Introduction

The literature review introduced the cultural notion that within the US there is a high value placed upon in situ interpretation employed through reconstruction. This chapter builds upon this foundation, exploring the origins and significance of this paired construct. Cultural historian Umberto Eco (1986: 8) suggests Americans are culturally predisposed to reconstructing or fabricating everything from art to historical sites. Architectural critic Ada Louise Huxtable (1997) concurs, pointing to places like Colonial Williamsburg as the impetus for American's cultural acceptance of reconstructions as authentic, or at the very least, accurate reflections of the past. Museum studies professor Barbara Kershenblatt-Gimblett (1998: 7) advances this idea, "by conflating a sense of the actual historical site with the techniques for producing this effect...the heritage production is represented as indistinguishable from ...the historical actuality."

Huxtable (1997: 3) would agree, noting Eco "observed that for a reconstruction to be credible to the modern public, it must seem 'absolutely iconic, a perfect likeness, a 'real' copy..." If there are times that reconstructions can be beneficial, and if certain cultures, as Eco (1986) suggests, choose to reconstruct, how does one know when a site should be reconstructed? For the many reconstructions that already populate the landscape, understanding their positive benefits and their negative connotations is crucial to making decisions concerning the future expenditures necessary to maintain them.
Why has the US culturally embraced both *in situ* interpretation and reconstruction as an acceptable method of interpretation? Eco (1986) implies that at historic sites in the US these two ideas merge to create reliance upon three-dimensional reconstructions placed upon the location of their original foundations. This high value placed upon *in situ* interpretation is explored by outlining how the US views and measures the integrity of historic sites. The reliance on reconstructions is told through a history of this presentation method during the period between the two World Wars. Finally, an evaluation of the interpretive methods utilized today illustrates the impact reconstructions have upon site interpretation. Together, the goal of this chapter is to explain why and how reconstructions are culturally valued and embedded within the interpretation of American historic sites. This chapter will provide the foundation to explore the nature, function and creation of *in situ* reconstructions and a context in which to weigh criteria that might provide insight into assessing and understanding the goals of specific reconstructions.

**Secretary of the Interior's Standards for Reconstructing Historic Properties**

The previous chapter introduced the Secretary of the Interior's Standards for the Treatment of Historic Properties that includes reconstruction as a treatment option (Department of the Interior 1995). This document sets forth standards for identification and use of evidence to avoid conjecture in fabrication mirroring international policies. Unlike widely accepted international practice, the Department of the Interior's guidance permits *in situ* reconstruction as long as archaeological remains are subject to mitigation, or the recovery of data, prior to
destruction. The focus is on regulating the appearance of reconstructions: reconstructions should be an accurate duplication without conjecture; and designs which were proposed historically, but never executed, should not be reconstructed.

By allowing mitigation of archaeological sites, these standards, and the current NPS Management Policies (Department of the Interior 2001) discussed in the literature review, permit and encourage in situ reconstructions, as opposed to ex situ reconstruction, or placement away from their original foundations. This practice places a greater value on the location of the reconstruction than on the authenticity of the original archaeological fabric. In the US, mitigation permits destruction of the archaeological remains through data recovery or excavation. Mitigation through excavation, while important to record and gather physical evidence for the proposed reconstruction, means that much, if not all, of the archaeological record can be destroyed in the process of creating the reconstruction. As this chapter demonstrates, in situ reconstructions have a long history in the US, and this study argues the use of in situ reconstructions within the US is deeply entrenched within our national documents, their supporting guidelines and the expectation of visitors to our historic sites.

The Secretary of the Interior's standards that permit in situ reconstruction, at the expense of the authentic fabric, are in keeping with principles guiding standing structures in the US. These principles are embodied within the National Register of Historic Places, a listing of structures and places important in the prehistory and
history of the US. The Register was created in the 1960s when the National Historic Preservation Act significantly expanded governmentally mandated historic preservation policy within the nation (Department of the Interior 1990: i).

**National Register's Aspects of Integrity**

To help guide the evaluation process for inclusion on the Register, the US National Park Service uses seven aspects: location, design, setting, materials, workmanship, feeling, and association, to guide assessments of integrity for structures and sites. The NPS defines integrity as "the ability of a property to convey its significance" and while determining integrity can be subjective, these seven aspects work as a baseline to understand "a property's physical features and how they relate to its significance" (Department of the Interior 1990: 44). All these criteria do not have to be present for a property to convey its significance, although the more it does possess the better. In utilizing these criteria, no one aspect is more important, but the property and its statement of significance help guide which are most crucial to a particular site. Unlike the international principles and the Secretary's standards, these seven aspects were not created to use specifically with reconstructed sites and therefore the following discussion includes a brief statement about how each is used within this document to expand the discussion of reconstructions.
Location

The first aspect, location, specifies that sites are important because of where they are physically. Location, combined with setting, stresses the significance of the actual spot and moved buildings, replicas, and recreated venues do not generally meet this test. In terms of reconstructions, location stresses the principle of *in situ* or upon the location of the original foundations, an idea mirrored in both the Secretary's standards and the National Register's Criteria Consideration E, discussed below. Because the aspects of integrity, as illustrated by location, place so much emphasis on *in situ* construction, a fair evaluation of a reconstruction using this criterion must balance the benefits of this principle with rigorous care of the historic fabric and the archaeological site, in terms of both gathering evidence and mitigation prior to construction. Because of the threat to the original archaeological remains, the best reconstructions should preserve as much historic fabric as possible and mitigate 100% of the archaeological remains impacted by the new construction.

Design

Design is a broad category that encompasses "form, plan, space, structure, and style," along with interpretation of space, scale, technology, materials, and ornamentation of a building or site (Department of the Interior 1990: 44). The idea of design also takes into account how features or buildings relate and the rhythm of the site. For reconstructions, design is reflected in how the evidence is utilized.
and transformed into a physical entity as well as how reconstructed components work with other entities at the historic site.

Setting
Setting is related to location, specifically referring to the physical surroundings of a property. Perhaps the key element to setting is "how, not just where, the property is situated and its relationship to surrounding features and open space" (Department of the Interior 1990: 45). Whereas location focuses on the exact spot of a reconstruction, setting brings in nearby elements, which surround the structure and manmade features, which accommodate visitors or serve to interpret a site.

Materials
Materials are all the physical elements that make up a property. Because the notion of historic integrity in the US is bound in authentic materials, this criteria states that for restored properties, key features "must have been preserved" and to retain integrity of materials the property must be "an actual historic resource, not a recreation; a recent structure fabricated to look historic is not eligible" and structures with reconstructed features do not usually meet the criteria (Department of the Interior 1990: 45).

By federal regulation, reconstructed entities are therefore excluded from exhibiting integrity because the materials used are not authentic. In the US, the concept of integrity is defined by the presence of original fabric that dates to the period of
significance. Because the definition of materials is in complete conflict with reconstructions, this study expands the concept whereby materials are evaluated upon how well they replicate what is known about a property.¹ Building elements should reproduce a property in both kind and form and be based upon all available evidence.

*Workmanship*

Workmanship is the actual craftsmanship that created the structure. It can embody everything from painting and carpentry to more sophisticated finishes such as graining and plaster ornamentation. Whereas the definition of materials specifically excludes recreated elements and stresses period or historic features, the definition of workmanship does not expressly exclude restored or recreated features as ineligible of possessing integrity if executed in a quality manner.

*Feeling*

Feeling is the presence a property conveys from a combination of "design, materials, workmanship and setting" or other combinations of elements (Department of the Interior 1990: 45). It is the ability of a property to exude its historical meaning through the multi-sensory elements experienced or the "sense of place" so important to a historic site (Cameron 2000). Feeling is linked to both

¹ The National Register also makes allowance for changes in material, especially for parts of historic properties that are periodically changed, such as shingles on a roof. Thus a historic building does not have to have its original shingles but it would have to have replacement shingles of a similar type as were originally on the building.
location and setting but also takes into account materials and workmanship for the impact a property makes upon a visitor both in site and execution.

Association

Association is the link between a place and the significant person or event being represented. The NPS specifies that association must be the actual site of the event and be intact enough to convey that idea to a visitor. Association requires some physical presence to survive in order to relate the idea of the past event within the present. Both association and feeling place great emphasis on the actual location and therefore work to reinforce the notion that only the actual spot an event happened has the ability to convey significance.

Aspects of Integrity and World Heritage Designation

These seven aspects of integrity form the basis of how the US evaluates significance for historic properties. Their emphasis on the actual location, as stressed in five of the seven ideas (location, design, setting, feeling and association), influences interpretation by strongly suggesting that it should occur at the actual location. Integrity, and by extension authenticity, is bound in this notion that to disregard these aspects undermines the interpretation and ability of a site to convey its historic qualities.

Ideas of integrity and authenticity, while fluid culturally, do possess global authority. The Operational Guidelines for nominating sites to the World Heritage
list (UNESCO 2005: paragraph 82) assesses authenticity or if their "cultural value...are truthfully and credibly expressed" using five of the seven US aspects as measures: design, materials, location, setting and feeling; only workmanship and association are not listed. These Guidelines also list: function; traditions, techniques and management systems; and language and intangible heritage, as factors for evaluating authenticity. The adoption of these concepts by UNESCO for World Heritage assessment suggests that the aspects of integrity represent ideas that are not merely culturally relative to American historic sites.

National Register's Criteria Consideration E

Placement on the National Register is not generally an option for reconstructions because most do not meet the NPS's test for integrity or age used to evaluate site significance. Because so many National Register districts do contain reconstructions, the Register has incorporated criteria for these properties to be evaluated and determined eligible for listing. Criteria Consideration E specifies "A reconstructed property is eligible when it is accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan and when no other building or structure with the same associations has survived. All three of the requirements must be met" (Department of the Interior 1990: 37).

Definitions of the criteria are, not surprisingly, very similar to the Secretary's standards with "accurately executed" being based upon physical and documentary
evidence to ensure a lack of conjecture. "Suitable environment" takes into account the "physical context" and the "interpretive scheme" requiring that eligible reconstructions "must be located at the same site as the original...and must retain integrity" and the "reconstruction must not be misrepresented as an authentic historic property" (Department of the Interior 1990: 37). Specifying that reconstructions be located at the same site as the original reinforces the high value placed upon location.

The high value placed upon location is further reinforced in the eligibility requirement that the reconstruction must sit within a grouping of buildings that are restored (extant) rather than reconstructed. In this way the NPS ensures that eligible reconstructions are used to fill in gaps or restore a landscape rather than being the anchor or sole entity within a historic site. Many authors do not consider this an actual reconstruction but rather a restoration of a larger entity (Jeffrey 2001; Mackintosh 1992; Miri 2001; Weeks 1994). The acceptance of reconstructions as a means to infill a larger landscape encourages in situ placement since anything else would not work within the confines of the whole. Additionally, this also discourages ex situ placement of these buildings because rather than primarily perceived as reconstructions, which conceivably could be constructed anywhere, they are means of restoring a landscape.
In situ Interpretation

These three examples, the Secretary's standards and the National Register's aspects of integrity and Criteria Consideration E, all place an extremely high value on the idea of location. They are also the codified foundation for the occurrence and emphasis in the US on in situ interpretation. The definition of significance, and by extension what is considered historically important, within the US centers, around the idea that to be a valid, authentic entity the historic site must be positioned on its exact location rather than moved or located elsewhere. Because the US measures the validity and authenticity of historic places by how well they convey their significance and because this is measured by aspects which place enormous emphasis on the actual location, or sense of place, the cultural notion of authenticity within the US is circumscribed within the idea that there is only one location for interpretation of a specific event or building. That location is on the original site. This concept has led to a national culture valuing in situ interpretation at the federal, state and local levels and within the private sector as well.

History of Preservation and Tourism in the US

While this explains why in situ interpretation is valued at historic sites, it does not address why reconstruction is overwhelmingly chosen as the method of interpretation. The preservation movement within the United States began with the purchase of Mount Vernon by the Mount Vernon Ladies' Association

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2 A moved building, for example is only eligible for the National Register if defined by its architectural significance. Moved buildings associated with important persons or events are not listed on the National Register (Department of the Interior 1990).
This action not only initiated additional preservation efforts, it also provided inspiration for historic preservation across the nation. Prior to the 1853 founding of the MVLA some local preservation movements were already in place but the publicity surrounding the Association's fundraising and their purchase of the property inspired both national and state organizations to embark upon preservation projects during the latter half of the 19th century. The Ladies' fundraising, public relations and marketing accomplishments inspired efforts to save much of the built environment relating to the founding of the US. The influence of the MVLA "to the early house museum movement cannot be overstated" (West 1999: 5). Charles Hosmer (1965: 57) succinctly points out that "Mount Vernon was the first successful nationwide effort at preservation...the Mount Vernon movement would influence preservationism for years to come...from the ranks of the younger lady managers of the Mount Vernon Ladies' Association were to come the leaders of the great wave of patriotic associations in the 1890s. The effect of Mount Vernon can hardly be overestimated, for almost every early preservation group had some contact with the Ladies' Association."

American preservation during the second half of the 19th century, influenced by the MVLA, was dominated by women's organizations (e.g. Daughters of the Texas Republic, Ladies Hermitage Association) or organizations comprised of both genders but with females dominating membership ranks and leadership positions (e.g. Association for the Preservation of Virginia Antiquities, Valley Forge Centennial Association) (Lindgren 1993: 10-11; West 1999). During these early
years preservation organizations across the nation labored under the relatively new concept that buildings associated with historical events were important. As James Lindgren (1993: 243) states, "buildings reified values necessary for social stability. They held memories about home, family, and life that gave personal meaning to preservationists."

Women dominated these organizations for a variety of reasons but the most influential was the effect of the Civil War upon society, especially Southern families and communities. In the years following the Civil War, women were thrust into a role of holding and keeping families together and this, combined with the effects of the surrender and reconstruction, caused many wealthy matriarchs to look outward for symbols of what they held dear. Scholars suggest that primary among these symbols was the home and in looking at their history they drew upon home and the Colonial and early American period, the years of America's foundation, as the primary symbols to inspire and motivate. (Brundage 2000; Hosmer 1981; 1965; Kammen 1991; Lindgren 1995, 1993; Linebaugh 1996; West 1999). Although men were involved in some of the early historic preservation efforts, they were not the driving force behind them; instead during this difficult period throughout the American south, southern men were involved in trying to recover economically, spiritually, and physically from the Civil War.

Most of the women-influenced preservation organizations during the late 19th and early 20th centuries were specifically interested in historic buildings and sites as
symbols to be used to influence, educate and mold future generations (Hosmer 1965; Kammen 1991; Lindgren 1993; West 1999). During these early years, "patriotism and commemoration vastly outweighed aesthetic value as motivating factors" when choosing sites to preserve (Kammen 1991: 260). Gradually, male-dominated preservation groups began to emerge contrasting from the earlier organizations with more than just the gender of their leadership. The Society for the Preservation of New England Antiquities was the most influential of these organizations to rise to national prominence during this early period. This group favored a strict, scientific approach to preservation, favoring original materials and placing a value on aesthetics (Lindgren 1993: 237-238). Male-led preservation organizations (e.g. National Park Service, Colonial Williamsburg) became the norm in the period after World War One and have dominated the US preservation movement ever since.

James Lindgren (1993: 247) contrasts the Association for the Preservation of Virginia Antiquities (formed in 1889) with the National Park Service (1916) and the Williamsburg Holding Corporation (1923), the precursor to Colonial Williamsburg, to illustrate this shift in preservation that occurred during the years between the World Wars. He assessed the former, as "local in orientation, personal, idiosyncratic, eclectic, and mindful of historical patterns, including women's role in preservation" while the latter was "large in scale, impersonal, bureaucratic, scientific, and male." This shift from a female-dominated preservation ethic rooted in traditionalism and symbols to a male-dominated one
focused on science, progressivism and aesthetics, had broad implications on preservation activities nationwide. The shift is important for this study because reconstructions were not routinely part of the early preservation tradition but they become a popular method of interpretation during the interwar years and remain so today.

**Origins of Reconstructions**

Scholars link the shift from female-dominated preservation efforts focused on symbolism and traditionalism to male-dominated ones immersed in science and professionalism in US historic preservation to a number of social changes brought on during the decade after World War I (Hosmer 1981: 1; Kammen 1991: 304; Lindgren 1993). The most influential of these changes was the rising popularity and availability of the automobile. Michael Kammen (1991: 539) discusses the "intimate connection between cars and widespread access to meaningful places from the American past." In 1895, four automobiles were registered in the US and there were 20 historic houses open to the public. Within 60 years there were more than 61 million cars and 1,000 historic sites. James Lindgren (1993) asserts the new wealth during this period freed southern males from business and allowed them to take a greater interest in the preservation movement, something women had overseen during the economic hardships of the Post-Bellum period. This prosperity had an additional effect, providing more leisure time for individuals and the combination of free time, wealth and transportation created a generation who began exploring in unprecedented numbers. Hosmer's (1981) statistics suggest the
immense transformation brought by these societal changes. Visitation to National Parks increased almost 10 times between 1914 and 1926, while weekly earnings more than doubled.

As Americans began to travel and visit historic sites and National Parks, progress began to alter the landscape of rural areas with miles of roads, service stations, restaurants and motels to provide necessary services for these new travelers. This progress, brought on by the automobile and the related societal changes during this period, had an effect upon American culture by altering the face of preservation at historic sites. The combination of this progress upon how sites were preserved is illustrated in the creation of Colonial Williamsburg. Dr. William A. R. Goodwin, director of endowments for The College of William and Mary and rector of the historic Bruton Parish in Williamsburg, was "the first major figure to possess this expanded vision" of how traditionalism, in terms of looking back at a glorified past, and male-dominated preservation could alter historic sites (Hosmer 1981:11). This evolution is important to this study as it was manifested in reconstructions and the emphasis upon restoration and interpretation at historic sites rather than the veneration of ruins, the hallmark of earlier female-dominated preservation efforts at historic sites.

Goodwin successfully lobbied philanthropist John D. Rockefeller, Jr. in 1926 to finance his dream for Williamsburg, the colonial capitol of Virginia. Their partnership produced a revolutionary project whereby surviving buildings were
restored as well as an intangible "spirit of the past" created through the recreation of the entire town (Hosmer 1981: 11-13; Lindgren 1993: 225). Although termed a "restoration," this project was anything but restoration or preservation. By the start of Goodwin and Rockefeller's work in the mid-1920s, most of Williamsburg's 18th- and early 19th-century structures were no longer standing. During the ensuing restoration only 88 standing buildings were restored. This is in stark contrast to more than 700 buildings that were demolished and 350 that were reconstructed (Lindgren 1993).

While the reconstruction was based upon historical and architectural research, decisions were made which virtually eliminated the 19th-century built environment. These decisions also impacted the appearance of the retained buildings and reconstructions and the overall image of the town, based upon how those in charge thought it should look (Brown and Chappell: 2004, 1992; Chappell and Wenger: 1995; Handler and Gable 1997; Noël Hume 1999). This tendency, "to gild the lily" or make a reconstruction better than it was is a hallmark of the early Colonial Williamsburg reconstruction as well as others from the time period including George Washington's Birthplace, George Washington's Gristmill and Valley Forge all discussed in Chapter Four (Mackintosh 1990). Architectural historian Carl Lounsbury (1990) documented how the reconstructed capitol was altered to fit the restoration architects' image of the colonial capitol despite contrasting physical evidence. Additionally, the development also froze Colonial Williamsburg within a recreated image of how these developers imagined a
colonial town. By reconstructing something to a specific point in the past, the 
evolution of a site is destroyed and this compromises the authenticity of a place, 
not to mention destroying authentic fabric and the record of this evolution 
(Huxtable 1997; Weeks 1994; White 2003).

Colonial Williamsburg was the catalyst that brought reconstructions into the 
mainstream of historic preservation. The development also influenced the NPS to 
become more involved in the management and interpretation of historic sites. 
With more historic sites under federal control, passage of the Historic Sites Act of 
1935 was a direct result of the influence of Colonial Williamsburg combined with 
the economic pressures of the Great Depression. Historian Barry Mackintosh 
(2004: 66) writes that the NPS's historic preservation program "was inevitably 
influenced by Colonial Williamsburg." Archaeologist John Jameson (2004b: 4; 
see also Jameson and Hunt 1999: 38 - 39) suggests the development of Colonial 
Williamsburg "pervaded and guided the work of the NPS and other federal 
agencies in scores of New Deal public works projects carried out in the years 
preceding World War II."

Today, more than 85 years later, historic sites continue to model and compare 
themselves to the Colonial Williamsburg Foundation. The use of widespread 
reconstructions by the Foundation was immensely popular with the public and 
brought professional legitimacy to the practice, especially during the years 
preceding World War Two. During this period two tenets gained prominence,
both significant ideas within the Colonial Williamsburg canon. The Foundation, and the male-dominated preservation entities, emphasized both education and authenticity. Acceptance of these ideals fostered support for reconstructions at other historic sites and by many disciplines involved in their creation (Kammen 1991: 373).

Adoption of the term "restoration" rather than "reconstruction" by the Colonial Williamsburg Foundation is an indicator of their emphasis on authenticity. By referring to their work as a "restoration" they promote their goal of "bringing back" or the "reestablishment" of colonial Williamsburg, as if the colonial capital was hiding, waiting to be found. In actuality, Goodwin and Rockefeller reconstructed, or created Colonial Williamsburg, in almost all new materials. Because of the impact of these two terms, one is overwhelmingly used to refer to this site rather than the other and this perpetrates the idea that Williamsburg is an authentic or genuine town. Huxtable (1997: 16) vehemently opposes the Williamsburg restoration and the influence this development had on historic preservation as giving "a license to destroy."

Growth of Historical Archaeology

These factors, the transformation of historic preservation organizations, the changes within American society, and the emphasis on education and authenticity at historic sites, all coalesced in the period between the World Wars and one consequence was a dramatic increase in the use of reconstructions by numerous
historical sites. Among the sites reconstructed during the late 1930s were Ocmulgee, GA; Fort Loudoun, TN; and Hopewell Furnace, PA. In Charles Hosmer's (1981: 953) history of the American preservation movement, *Preservation Comes of Age*, Aubrey Neasham, a NPS historian in the west, concisely summed up the pressure tourism places on historic sites. "The argument is put forth by some that the visiting public goes to an historic site to get as full a picture as possible. From that standpoint, many consider it necessary to restore and to reconstruct the historic setting in full." He continued by outlining the dilemma created by reconstructions.

"What results is an illusion. The illusion not only affects those who see it today, but also those who will see it in the future, even to the extent that what we have reconstructed and restored may be called the work of our predecessors. Such reconstruction and restoration is not only artificial and unreal, but scientifically unsound. No matter what we do, we cannot supply in exact detail or spirit that which was done before us."

Besides creating a culture for reconstructions, this dynamic resulted in the birth and maturation of historical archaeology as a subfield of American archaeology. The emphasis on authenticity, which rose in significance during the first half of the 20th century, demanded a rigorous methodology to evaluate findings. Although it took archaeologists many years to embrace their contribution to, and relationship with, historic preservation, the notion of authenticity made the archaeologist unique in understanding stratigraphy, artifacts, landscape, foundations, and culture.

During the initial years of the Williamsburg restoration professional archaeologists were neither included nor willing to participate in the study of the recent past or
prepared to interpret colonial-era foundations (Brown and Chappell 2004; Noël Hume 1999). The early archaeological work at Williamsburg, as well as numerous other sites at this time, was undertaken primarily by architects rather than professional archaeologists. When an archaeological draftsman, Prentice Duell, was hired to join the Williamsburg team he worked on-site one week per year, spending the bulk of his time in Egypt and Philadelphia. During these early years, archaeological investigations were "supposed to reveal as much as possible about the foundations of long-lost buildings. Artifacts that came out of the trenches had value only as long as they contributed to an understanding of the original use of each of the structures the architects wanted to rebuild" (Hosmer 1981: 31, 890-891; Linebaugh 1996).

At this time, historical archaeology was not yet a recognized discipline, but archaeology did have a prominent role within the development of national preservation policy during these years. Architect Fiske Kimball was influential in the hiring of Duell at Williamsburg, and Kimball, along with archaeologist Alfred Kidder and anthropologist Clark Wissler sat on the inaugural National Park Service Advisory Board convened in 1936. The inclusion of an archaeologist and anthropologist on the Board is evidence that the Park Service recognized both disciplines were important to the foundations of national preservation policy (Jameson 2004b; Jameson and Hunt 1999; Mackintosh 2004, 1990).
At the Board's second meeting in May 1936, while discussing the need for a policy on restoration, Kidder proposed that ruins were of great public interest and should be preserved and interpreted as such. He felt that a reconstruction would also be helpful for interpretation but "new building construction should not be on the foundations but in the immediate vicinity" (National Park Service 1936: 19).

Verne Chatelain, the Park Service's chief historian questioned Kidder if it "is proper to construct it at a different site than the original" especially if it was full-scale and not a model (National Park Service 1936: 19). Clearly, there was already a strong feeling that place was an essential element of interpretation.

Slowly, as more reconstruction projects were undertaken and as historic sites continued to expand their interpretation for educational purposes, individuals trained in archaeological methods began to assist in the endeavor. Jean (J. C.) Harrington, an architect who became an archaeologist after drawing Spanish mission churches in New Mexico, was a pioneer in the field of historical archaeology. He was hired by the National Park Service in 1936 to supervise excavations at Jamestown because of his combined experience in archaeology and architecture (Miller 1998: 2-3). During his career with the NPS he worked at numerous historic sites and helped shape the discipline. Harrington (1955) outlined his role in the history of historical archaeology as well as justification for this emerging sub-discipline and his work at Fort Necessity, which is discussed in Chapter 4. The other major influence on early historical archaeology was Ivor Noël Hume who began a long career at Williamsburg in the late 1950s. Noël
Hume's influence on the importance of artifact analysis, context, stratigraphy and archaeological data to inform about more than merely building foundations is enormous (Brown and Chappell 2004; Noël Hume 1999).

Until 1967, when the Society for Historical Archaeology was formed, most archaeologists remained hesitant to participate in the investigation of historic sites. Beginning in the early 20th century, archaeologists had embraced restoration work on prehistoric sites in the southwest and utilized structural ruins, artifacts and stratigraphic relationships to advance anthropologically-based archaeological research into cultural identity and cultural chronology. Alfred Kidder, the archaeologist on the Park Board, was the first person to utilize extensive stratigraphic methods in North America (Willey and Sabloff 1974: 89). The slow growth of historical archaeology during the initial phase of reconstructions at historic sites resulted in the loss of archaeological data and misinterpretation of sites, especially those components based upon earthfast rather than masonry construction. Additionally, because architects were often in charge of these early projects, such as Henry Chandlee Forman's work at Jamestown and St. Mary's City, there was a greater emphasis on structural foundations and an almost complete disregard for artifacts, stratigraphy, or non-masonry components (Foreman 1938). The first half-century of reconstructions in the US were severely lacking in archaeological data, had almost no sensitivity for the archaeological resource and numerous archaeological sites were destroyed because historical
archaeology and historical archaeologists were such latecomers to the historic preservation field.

**Hierarchy of Interpretive Options**

The period between the World Wars saw the rise of reconstructions because a number of characteristics coalesced to create a climate whereby historic house museums and historic sites faced increased pressure from tourists. The initial success of the Colonial Williamsburg-model implies that during their vacations these visitors appreciated and grew to expect greater authenticity and educational opportunities which were at the core of the Foundation. As the number of historic sites increased so did the competition to attract visitors and following this model they increasingly embraced the philosophy of *in situ* interpretation. As Miller (2007: 35) notes, "sites themselves can be used to tell people about the fascinating revelations and the rich stories derived from archaeological and historical exploration." Ultimately this was recognized by the NPS in the prominence of location as a factor of integrity. Today this type of historic site is more widely experienced than the alternative of moved buildings into an open-air museum, such as popularized by Skansen in Stockholm, or recreated buildings not in their original location.3

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3 Both these types of museums exist in the US, for example at Henry Ford's Greenfield Village, MI where historic buildings from multiple periods were moved and Old Sturbridge Village, MA an interpretation of an 1830s New England village combining both relocated historic structures replicas and representations of historic buildings (Fitch 1990; Hosmer 1981; Lindgren 1995). The focus of this work is not on these types of sites, but rather venues that utilize *in situ* reconstructions in their interpretation of the past.
Although *in situ* interpretation remains popular, three-dimensional reconstruction is not the only option utilized for interpretation of archaeological sites after excavation. In general, long-term post-excavation interpretation of archaeological sites occurs for educational and/or economic benefit. Where public visibility is discouraged, not possible, or otherwise not feasible, little or minimal interpretation is generally undertaken.

The degree to which sites are interpreted is related to the tourism and educational potential of the site (Stone and Planel 1999a). Many of the sites incorporating archaeological interpretation, either of ruins or reconstructions based in part on archaeological data, also have an extant architectural component. Compounding this scenario is the fact that much of the archaeological heritage in the US is not visible on the landscape prior to excavation, and the recovered resources are often earthfast or earthen features, which are totally destroyed through excavation (Miller 2007). Carson et al (1981) identified a prolonged period of earthfast architecture, especially in the mid-Atlantic region. This construction method, a hallmark of 17th-century building, remained popular throughout the 18th and early 19th centuries. Constructed of wooden posts set into the ground, earthfast buildings are generally only visible through archaeological excavation and their physical remains (i.e. postholes, postmolds, sillmolds, hearths and sub-floor pits) do not provide easily interpreted visual features and in many cases, the process of excavation completely destroys these features. There is very little left to interpret at these sites after excavation. Even when these types of sites are not completely
excavated, exposing the soil features to public view is detrimental to their survival and most visitors have little experience reading dirt (Miller 2007).

Because archaeologists in the US rarely start with ruins or other masonry visible on the landscape, the decision about which treatment option to use at these sites becomes in some ways more complex than when starting with a mixture of standing structures and invisible archaeological remains. To apply the "preserve as found" philosophy would present a decidedly lopsided picture of American history, with the majority of the history hidden beneath the earth. To preserve earthfast architecture or many of the other features, such as sub-floor pits, a signature of the Southeast's antebellum enslaved population, would create an exhibit that even the most knowledgeable visitors would find difficult to comprehend.

Tourist site administrators, seeking a means to interpret non-extant historical sites, are therefore faced with a wide range of options to provide an attraction that delivers a comprehensible message within the realm of practical possibilities in terms of finances, infrastructure, legislation, and other constraints placed upon the site (Miller 2007; Pearce 1990; Pogue, White and Leeson 2002). Pogue, White and Leeson (2002: 58) identify seven treatment options for archaeological sites:

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4 Miller (2007: 38) identifies five categories of interpretive method for archaeological sites at St. Mary's City, MD: 1. partial rebuilding of ruins with masonry elements; 2. wooden outlines; 3. ghost buildings or partial rebuilding; 4. full reconstruction; 5. re-creating landscape components. All but the final item are represented in the list of options reviewed in this study.
1) Archaeological remains reburied; features outlined
2) Archaeological remains stabilized or represented by partial reconstruction
3) Archaeological remains covered by structure
4) Archaeological remains within another structure
5) Archaeological remains reburied; computer simulation for interpretation
6) Archaeological remains mitigated or reburied; exterior reconstruction
7) Archaeological remains mitigated or reburied; complete reconstruction

The authors note that all of these options should include extensive archaeological excavation; research oriented in the pre-planning stage, as well as data recovery prior to any interpretive-related disturbance and monitoring during actual interpretive construction or other ground disturbance. They also assume all seven methods include some type of signage or exhibit panels that might include two-dimensional reconstruction, site plans or other devices to augment the physical site. The seven outlined options are specifically for on-site interpretation and not meant to be the realm of possibilities for interpreting an archaeological property off-site. Presumably once interpretation moves into a museum, or away from the original environment, one is faced with a universe of other alternatives, as well as different issues inherent in these alternatives.

A number of factors should lead planners to choose an alternative that is both beneficial for the site while doing least disturbance to the archaeological remains.
Pogue, White and Leeson (2002: 58) compare the decision of picking an option in terms reserved for the stock market, "risk and reward." They define risk as "potential for error, damage (to the archaeological remains), and financial cost (both in terms of initial cost and continued maintenance)" while the reward is viewed in terms of visitor education and ease of interpreting the commodity. The lowered numbered options have a lower risk and therefore an overall lower reward while the higher the option number the higher the inherent risks and therefore the greater the reward potential. Not all sites of one type can claim the same reward due to a myriad of external factors including the ability of a visitor to decipher the site, number and educational background of visitors, amount of conjecture utilized in the interpretation, or site ambience, to name a few. Miller (2007: 38) suggests that "actual sites demand different approaches" due in part to the factors above and the nature of the archaeological remains. Some archaeological remains are more suited to display and / or comprehensible by the visitor.

In general, American tourist sites strive to maintain continuity in their interpretation. While some sites do mix presentation methods, most have only one or at most two methods, which they use to convey their past to visitors. St. Mary's City, MD, is one site that utilizes a variety of methods (Miller 2007). In part this is done for economic reasons; full reconstruction is the most costly option. But this site also utilizes a variety of methods to maximize the interpretation of Maryland's first capital, where evidence for a complete Williamsburg-type reconstruction is lacking and would severely damage the archaeological
component. This site in essence functions as an archaeological park and archaeologists and the buried resource figure prominently in most of the decisions affecting the interpretation and presentation of the historic site. That said, three-dimensional, in situ reconstructions are utilized at St. Mary's and the museum most recently built both a large brick chapel and house for printing.

Most museums that utilize a variety of methods do so for similar reasons. Often less rewarding methods are changed when the funds are raised to allow reinterpretation to occur. Methods are mixed at times due to a lack of evidence to portray a more complete reconstruction, although lack of evidence does not deter full-scale reconstructions often enough. Continuity of treatment options creates less confusion for the visitor, who is not faced with a barrage of methods to interpret. Likewise, American sites tend to choose a limited period of significance to interpret, often one individual's life or one family's ownership of a property, which vastly reduces the possibilities of stories told.

Archaeological Remains Reburied; Features Outlined

This option holds the least potential for reward but is also the least risky. In general there is little damage to the archaeological resources which remain after excavation. Outlining a structure's footprint is non-invasive, low cost, and requires very little maintenance. There is very little conjecture involved in this method because what is being illustrated is a physical remain, in most cases a foundation, discovered through excavation.
Deciding what to interpret post-excavation is rarely within the jurisdiction of the archaeologist. Site administrators more often make decisions to expand interpretive efforts by adding new components to attract visitors. Because archaeologists have an intimate role in the excavation and recovery of data and understand the resource, they understand which option combines what is best for the resource combined with how these options reflect and reveal the past (Hurry and Bodeman 2007; Jameson 2004a; Miller 2007; Noble 2004). By making archaeologists more involved in these decisions, the most appropriate and comprehensible method in terms of the resource and the presentation can be chosen. These discussions should occur during the excavation process, rather than before or after excavation (Hurry and Bodeman 2007; Miller 2007; Noble 2004).

The benefits of outlining are weighed by the low reward inherent in this treatment. This method has many of the same limitations as two-dimensional illustrated reconstructions, and is generally void of life that an artist can insert into a painting or drawing (James 1996). This method, as well as the second method, serves to create a bucolic, park like, peaceful atmosphere, which can be extremely misleading when used for sites that were populated urban centers (St. Mary's City, MD; Jamestown, VA), industrial sites (Washington's Gristmill and Distillery, VA), or the bustle of a plantation center (Washington's Birthplace, Belvoir Plantation, VA). The cacophony of the past is difficult to interpret from what is in essence a two-dimensional depiction.
When historic sites are interpreted through a combination of outlining and one of the more visible methods, such as complete reconstruction, the outlined site's significance is diminished and becomes almost interpretively invisible. This diminishes one story in favor of the more prominently visible story. By mixing interpretive treatments, administrators are able to interpret potentially controversial sites less actively. When this happens on a plantation, generally the white owner's story is advanced at the expense of the enslaved one; or at a battlefield, the officers' story at the expense of the enlisted soldier, in an urban setting, rich individuals are more often interpreted through reconstructed buildings than poor ones. The visible, three-dimensional building becomes a more visible, understandable element and therefore can incorporate more complex interpretation.

Belvoir Plantation, the Fairfax family's colonial Virginia home, is interpreted using both outlines and the next technique, stabilized ruins. This plantation is today located on Fort Belvoir, a large army base and while the Army has sponsored excavation at the site, interpreting their property's cultural past is not a high priority. It is in some ways surprising that the Army pursued interpretation of this site at all, and not surprising that their interpretation consists of a method which does not emphasize the activity and large number of structures present during the property's colonial period.

George Washington's Birthplace and George Washington's Gristmill and Distillery, discussed in Chapter Four, are also examples of sites with both
prominent and diminished stories. The fact that the actual site of the birthplace is, and for years the controversial distillery was, interpreted in such a "low risk" manner has more to do with the sites' modern histories than any concern for the archaeological component.  

_Archaeological Remains Stabilized Or Represented By Partial Reconstruction_

This method has much in common with the first treatment option. In both, foundations are demarcated but the first illustrates merely outlines, while this option can exhibit some masonry foundations, or utilize a "ghost structure" — an outline of a building in three-dimensions. This introduction of the third dimension, providing varying degrees of height and volume to a site, makes this method more easily deciphered. While an outline can be confusing, introducing some relief provides the visitor with a better idea that buildings are being illustrated.

The risk to the archaeological record is minimal and through careful planning and mitigation loss of data is negligible. Care must be taken in stabilizing foundations, both in capping visible remains and in demarcating old versus new construction. This distinction is vital not only for interpretation but for future maintenance as well. The rewards of this method include a better idea of where and how sites fit into the landscape. Interpretation of sites, and their use within educational initiatives, is easier due to the presence of a third dimension.

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5 Removal of the brick outline at the Distillery occurred in 1999 during the complete excavation of the site undertaken by Historic Mount Vernon. The archaeologists and on-site signs interpreted the excavation; a three-dimensional reconstruction opened in April 2007.
Depending upon which subset of this option is chosen, varying degrees of conjecture are necessary. For stabilization and capping of foundations (Fort Selden, NM), foundations rebuilt just a few feet above the ground surface (Jamestown NPS and Chancellorsville Inn, VA), or timbers set into the earth to show the placement of posts (Kings Reach Plantation, MD; Wolstenholme Town, Williamsburg, VA) the height of the exhibit is only a few feet above the current ground surface leaving building height and roof construction, generally two archaeological unknowns, to the imagination. For ghost structures (Poplar Forest, VA; St. Mary's City, MD; Franklin Court, Philadelphia, PA) the height of the structure is visible and the roof pitch is also apparent. These are usually conjectured details, but other building specifics, such as door or window placement, and building materials, are left to the imagination.

While this method provides a third dimension, this aspect is minimalist in detail and scope. This creates a reconstruction requiring interpretive skills that much of the general public lacks. In the US, visitors to historic sites expect to "learn about the past through sensual experience" and can be confused by the lack of details inherent in this method (Hill 2001: 9). Likewise, Miller (2007: 44) cautions that visitors need an explanation to comprehend this exhibit type. At St. Mary's City, MD they are extensively used with a high degree of visitor approval after this introduction.

6 Wolstenholme Town, or Martin's Hundred, an early 17th-century settlement is located adjacent to Carter's Grove Plantation and was owned by the Colonial Williamsburg Foundation. The Foundation sold the property to a private owner in 2007.
At Poplar Forest, Thomas Jefferson's rural retreat south of Monticello, archaeologists excavated three slave quarters from 1993 - 1996. A ghost structure of one of these quarters was constructed after excavation to "help visitors visualize the size and location" of this quarter (Hill 2001: 5). A ghost structure was chosen for the low cost, quick construction time, and relative low level of inference necessary for the construction. The missing evidence for roof pitch and wall height was provided by a comparison of known Chesapeake slave quarters and consultation with Colonial Williamsburg's architectural historians (Heath 1997; Hill 2001).

According to the museum's former Director of Archaeology and Landscapes, Barbara Heath, and the Director of Restoration, Travis McDonald, ghost structures act as "spatial markers" and allow house museum visitors to experience the "built environment of the past" (Hill 2001: 7-9). McDonald argues that reconstruction plans must consider institutional mission as well as available evidence and feels a lone total reconstruction is less effective than a complex of ghost structures. Only one of the three excavated quarters was reconstructed due to economic constraints. Heath views the presence of one structure a success and hopes additional ghost, or possibly complete reconstructions, will one day populate the Poplar Forest landscape (Heath 1997; Hill 2001: 7).

Heath (Hill 2001: 7-8) is stronger than McDonald in her pro-reconstruction policy, stating "misrepresentation inherent in the absence of these structures (slave
quarters and other vernacular architecture) from the historic landscape outweighs the possible inaccuracies in architectural details." Heath (1997: 190) criticizes Monticello, Thomas Jefferson's home in VA, for waiting five years to outline slave quarters found archaeologically while replanting the mulberry trees that graced the row of cabins.

Poplar Forest is also guilty of the same selective reconstruction decisions as Monticello. While Poplar Forest made the economic decision to interpret one of three slave quarters through a ghost structure, the institution is completely reconstructing the wing that housed Thomas Jefferson's offices and mansion support functions. The decision to mix interpretive treatments by completely reconstructing Jefferson's space while partially reconstructing only one-third of known African Americans' space has ramifications for what visitors see and comprehend about the landscape at the plantation. The mixed presentation methods at both Jefferson sites elevate his story by being part of the "real" landscape, while the interpretation of the enslaved population is not seen as "real."

Again, the "risk" to the archaeological fabric is not factored into decisions of what to completely reconstruct versus outline, severely diminishing one of the clear benefits of these first two options.

Archaeological Remains Covered By Structure

This method of interpretation places the archaeological remains on view while shielding them from the elements inside a protective structure. The structure can
be relatively small, encasing a specific feature such as drains (Rosewell, Gloucester County, VA), pottery kiln ("Poor Potter," Yorktown, VA), or dry well (Gadsby's Tavern, Alexandria, VA), or much larger providing shelter to an entire foundation (St. John's, MD; John White site at Jamestown APVA, VA).

The archaeological feature represents the reward of this option. The presence of this feature also acts as the risk. The exposure of the remains creates a risk which is often irreversible and destructive to the resource. Exposure of masonry or earth to weathering and changes to a stable environment can destroy the archaeological record. The preferred materials used for this method currently consist of plexiglass, corrugated metal, and synthetic tarpaulin; all create atmospheres with extreme fluctuations of both temperature and relative humidity, environmental conditions that do not foster long-term stability. Proper recording and mitigation are generally not done since the loss of fabric was unintentional. These coverings do not age well; plexiglass is prone to scratching and condensation for instance. Without periodic monitoring this option quickly becomes a worn exhibit.

Economically, this method can be inexpensive, and require minimal maintenance.

This option's rewards are mixed. The visible remains are a powerful statement on the landscape. They represent the "real" past in much the same way that capped foundations in option two create a powerful presence on the landscape. While these remains generally require a degree of written or visual interpretation, the very fact that they are visible serves to legitimize a site. The presence of the
archaeological ruin is powerful but these features are often removed from their larger context. The removal of the resource from a broader context makes the interpretive and educational reward moderate at best. When the viewing is obscured, or the interpretive panel confusing, the reward becomes extremely slight.

At Gadsby's Tavern in Alexandria, Virginia, for example, a dry well is covered with plexiglass in the middle of a sidewalk and stairs lead down to a viewing platform. A lone label reads "dry well" and provides a paragraph on the discovery of the well and its function as an ice storage chamber for a nearby tavern. The well is in the middle of a pedestrian zone and is some distance from its associated building. This distance serves to disassociate the archaeological feature from its larger context.

The disassociation of archaeological remains from their larger context is not restricted to urban features. At Rosewell Plantation in Gloucester County, Virginia, spectacular ruins of a 17th-century house dominate the landscape. In the grassy forecourt, two small plexiglass-covered squares provide peaks at an underground drainage system. There is no interpretation, merely intact brickwork below scratched plastic. The drains are exhibited merely because they were accidentally discovered, not because of a larger plan to illustrate colonial hydrology.
Archaeological Remains Within Another Structure

This option exhibits archaeological remains within another structure constructed as more than merely a protective covering. The structure can be either an interpretive structure or museum or with a different function altogether. Related to the previous option, this has similar low risks—the archaeological remains are preserved and available to view. Because the structure's function usually warrants climate control, the ruins are sometimes in a better environment. The long-term stability for the resource can make this less risky than the previous option. Maintenance and cost are also low. Because this option (along with the previous option) is technically a restoration, more in line with the British philosophy of "preserve as found," conjecture is minimal.

The rewards are also similar to the previous treatment—the main reward is the "thrill" of seeing a piece of the past as discovered. When the resource is within a museum or interpretive structure accompanied by a larger context, the interpretive or educational reward can be quite high. When the ruin is within a business, the reward is diminished due to the isolation of the feature. The potential for disassociation and isolation in this method serves to make this option less rewarding than the remaining options (Baker 1999; Pogue, White and Leeson 2002).

One example of this option is the hypocaust preserved in the Calvert House in Annapolis, MD. The hypocaust was originally below an exterior hothouse. Today
the imposing brick feature is in a hotel lobby, within an addition to part of the colonial house. An interpretive panel explains the feature, its discovery and its presence in a modern hotel. Like the shortcomings in the previous treatment, the hypocaust suffers from being removed from its larger context.

Disassociation of the ruin from a larger context is not inherent in this method as the new St. John's Museum at St. Mary's City and the church on Jamestown Island, VA illustrate. At Jamestown, ruins of an earlier church are exposed within a later church. This exhibit works in part because the function of both ruins and covering structure is identical. It is easy to decipher and does not require the public to switch mental gears to understand the archaeological remain within its "modern" structure. Additionally, the church is within a larger historical site and visitors are not coming to religiously worship but to experience the past by visiting the site of the 1607 settlement. The St. John's Museum is also part of a larger heritage site, St. Mary's City, the first English settlement in Maryland. In this example, the archaeological ruins of the St. John's house are preserved and interpreted within a larger structure which serves as a museum. This new exhibit had extensive input from archaeologists during the conceptual phase (Hurry and Bodeman 2007; Miller 2007).

*Archaeological Remains Reburied; Computer Simulation*

Although very few historic sites in the US use computer simulation for on-site interpretation, the process has many advantages, most notably that it is very
sensitive to the archaeological remains. These techniques can divorce the setting from the reconstruction, when viewed inside a museum and because the computerization is easily recognizable, there is very little chance what the visitor sees will be mistaken for anything more than a simulation.

The highest profile site in the US using in situ simulation is Jamestown Rediscovery, on Jamestown Island, Virginia. This private excavation is focused on revealing the fort established at site of the first permanent English colony in North America. At the Archaearium, a museum devoted to telling the story of this fort and early settlement, computerized viewers allow the visitor to "see" the reconstructed fort while looking at the archaeological site of the fort. The visitor stands inside the museum at a large glass window and can control the reconstructed view and information presented by maneuvering the viewer. One of the drawbacks of viewers such as these (similar ones are used at Ename, Belgium) is that they must be positioned within sight of the archaeological remains because they rely upon the view of the site to provide the backdrop for the reconstruction. Construction of these viewers, while not as detrimental as rebuilding a building, can impact archaeological remains.

The irony of the sensitivity of the Archaearium's interpretation of the reconstructed fort using this viewer is that the museum itself was constructed upon the presumed archaeological site of "the Statehouse." Additionally, portions of the 1607 fort and associated buildings are reconstructed in situ for experimental purposes and to give
the visitor something tangible to see. The Jamestown Rediscovery project is also one of the few historic sites in the US where the archaeologist is a major decision maker in terms of interpretation and display. At Jamestown Rediscovery, even when computer simulations are employed, reconstructions continue to be built as something tangible upon the landscape.

The final two treatment options replace the missing elements of an archaeological resource, creating a presence on the landscape, which, because it is complete, is easier to understand than other reconstruction options but often has a high degree of conjecture. This study focuses on these two options.

_Archaeological Remains Mitigated or Reburied; Exterior Reconstruction_

This option has an extremely high risk factor. The archaeological remains are almost always destroyed through construction of the new structure, unless great care is taken to mitigate or bury them. Even when the site is well excavated, the creation of a recreated building or feature creates a fiction. Construction and maintenance costs of the new structure are very great. Unless an enormous amount of varying evidence survives for a particular building, the level of conjecture is greatest with these two final options. All reconstructions have some unknown elements that must be surmised or speculated upon. Worse, unknown elements are not the only time that conjecture is utilized in reconstructions. There are numerous examples where archaeological, historical or illustrated data was ignored to create a new building with fabricated elements.
Two examples of reconstruction projects that ignored evidence are the Capitol in Colonial Williamsburg (Lounsbury 1995) and the first iteration of Booker T. Washington's birthplace (Lounsbury 1995; Nowak, Foulds and Troutman 2004). Lounsbury's analysis of the Capitol reconstruction documents that physical evidence for an asymmetrical footprint were ignored by the architects because this was outside their notions of colonial design. The 1949 reconstruction of Booker T. Washington's birthplace did not replicate conditions as described by Washington in his autobiography. Instead, this log cabin was a "tidy all-American" replica (Nowak, Foulds and Troutman 2004: 49; West 1999: 145).

Just as the risks of this option are great, so are the potential rewards, both educationally and interpretively. Nothing creates an understanding of a property as seeing a complete structure. Whereas ghost structures or ruins can be difficult to understand, and two-dimensional outlines fail to provide the clues that height was part of the equation, the complete reconstruction leaves little to comprehend. Visitors can theoretically jump to broader themes for interpretive purposes since much of the deciphering of a ruin is presented (Esquerra 2007; Fry 1992; Jeffery 2001; Miller 2007; Pogue, White and Leeson 2002). Because this option does not include the furnishing and interpretation of the structure, but rather the presence of the structure on the landscape -- an adaptive reuse in restoration terms -- the reward for this option is less than the final treatment option.
There is rarely enough structural space at a museum to house all the support needed to operate. Demand for retail, office, storage, visitor services and security functions are placed in competition with exhibit and interpretive space. New construction is expensive and when built too close to the core of a historic site can damage archaeological remains as well as visual considerations and the setting. Because physical reconstructions blend into their historic scenery, there is a tendency to place infrastructural needs inside these buildings. Often this is not just about space but about the interpretation as well. By reconstructing a building a site has placed the physical presence of that entity back on the landscape, but the story within the building is sometimes too controversial, or just not in keeping with interpretative focus, or the space is needed for modern purposes. This represents the most severe misuse of reconstructions and is much worse than a well executed reconstruction with engaging interpretation. To build something new that destroys archaeological resources and then not use it as an interpretive stage has completely sacrificed the authentic resource for no gain.

Fort Loudoun in Tennessee has an example of this practice. A troop quarters was reconstructed and today, because of space constraints, it functions as restroom and storage rather than active interpretation to advance the stories of the soldiers stationed here (Distretti and Kuttruff 2004). Two additional examples of this option are discussed in detail in the next chapter, parts of the Greenhouse / Slave Quarter at Mount Vernon and the Miller's Cottage at Washington's Gristmill. These structures are present on the landscape but have limited or no interpretive or
educational function, therefore only telling an abridged version of their sites' stories.

These examples focus on negative aspects of reconstruction combined with adaptive reuse, and parallel the first two treatment options in terms of fostering diminished interpretation. In these options, an attempt is made to illustrate part of a site or story without having to interpret details which might be controversial or not fit a chosen theme. Much as the second treatment option "fixed" some of the shortcomings of outlining, furnished and interpreted reconstructions (the final option) moderate some of these issues for closed buildings.

*Archaeological Remains Mitigated or Reburied; Complete Reconstruction*

This option presents the greatest risk, but also the opportunity for the greatest reward. Like the previous discussion of adaptive reuse, the risks include total destruction, or at least disappearance of the archaeological site. In some cases, portions of the resource can integrate into the reconstruction (Mount Vernon's Stercorary and Greenhouse / Slave Quarter), but the result is generally lost on the visitor. When integration occurs, it is often so slight that the presence of the "real" within the recreated serves as a footnote rather than a focal point. Use of conjecture is greatest for this option because besides the exterior architectural details that can lack evidence, interior spaces must be furnished and interpreted, usually a highly problematic proposition. Additionally, cost and maintenance are highest for this option and to successfully interpret or educate with these spaces,
exhibits must be dynamic and fluid, more successful with expensive human resources than through inexpensive text.

The potential for reward, when measured from an interpretive or educational standard, is also greatest with this option by combining the physical presence of the structure with an interpreted and furnished interior. This creates a complete picture, allowing a visitor to "see" an image of the past. This image requires little work on the part of the visitor to comprehend and therefore virtually no critical thinking accompanies the process, leaving the visitor to think the past on display is the truth and that no interpretation is clouding the experience. This powerful option is successfully used for political or ideological purposes because the interpretation begins much farther along in the story (Rosenzweig and Thelen 1998; Stone and Planel 1999b: 10).

Motivated by the potential reward of this option, numerous examples of complete reconstructions populate the US. Many sites are completely (e.g. Fort Union Trading Post, ND; Saugus Iron Works, MA; Fort Vancouver, WA), partially (e.g. Appomattox Court House and Poplar Forest, VA), or in the process of being reconstructed (e.g. St. Mary's City, Historic Elk Landing and Mount Clare, MD; James Monroe Birthplace, VA). Both Elk Landing and Mount Clare openly reference the Colonial Williamsburg model, hoping to imitate the economic and educational success of that historic site (Cronenburg 1992; Fort Vancouver n.d.; Heath 1997; Hill 2001; Historic Elk Landing n.d.; James Monroe Foundation n.d.;
These six treatment options form a continuum for the presentation of the past at sites where most of the visible remains have vanished. The decision of which alternative to utilize for site interpretation depends on a variety of factors including institutional mission, presence of extant architecture, variety and type of evidence available, budget, and human choice. Unfortunately, what is best for the archaeological resource is rarely a factor in the choice of interpretive option. During the latter half of the 20th century, as historical archaeology has developed as a distinct discipline and as more archaeologists are involved in the process of creating reconstructions, more archaeological remains are being mitigated than during the reconstructions undertaken during the first half of the century, rather than destroyed without excavation, but this still results in the destruction of the authentic record of the past (Jameson 2004a; Noble 2004).

The result is also varied, with interpretation ranging from confusing, misleading, safe, lame, to extremely powerful. In general, historic sites must negotiate the greater risk and higher potential for return within their specific mission, budget, venue, among other factors – these are not simple questions and as these treatment options illustrate, each alternative carries both risk and reward.
With so many three-dimensional reconstructions in the US, measuring the "success" of a reconstruction is both objective and subjective. Some features such as use of evidence, care taken to recover, mitigate, or preserve the archaeological resource, craftsmanship and details of the construction, and carefully researched decisions for the inevitable use of conjecture can be measured somewhat objectively. Other factors such as feeling or association are more subjective in nature. Details such as hardware, building fabric, furnishings, interpretation, and surrounding landscape combine to create a sense of the past or ambience which can be extremely powerful and moving, or a mockery of the past. Currently there are no means to measure the success of an existing or proposed reconstruction and therefore it is difficult to assess if the reward of this presentation treatment is worth the risk. This study discusses potential measures to ascertain both the objective and subjective sides of this interpretive treatment to aid site administrators, archaeologists and managers in making informed decisions about utilizing reconstructions.

Conclusion

This Chapter discussed why heritage professionals and the heritage industry in the US values both in situ interpretation and reconstruction as the method of interpretation at historic sites. A detailed discussion of how the NPS, and specifically the National Register of Historic Places, weighs and evaluates historic buildings provided background to the importance placed on the actual location of a historic site. A brief history of historic preservation in the US and the role of
archaeologists in this endeavor presented the foundation for the prominence of reconstructions within the US. A number of factors during the decades between the two World Wars shaped a culture at historic sites that embraced three-dimensional, *in situ* reconstructions. Parallel to the continued growth and popularity of this treatment option during the 20th century, the field of historical archaeology matured into a professional discipline. This was, in part, a direct response to the demands of physically reconstructing the past *in situ* and the unique circumstances that this treatment option creates at historic sites, upon both the buried archaeological remains and the presentation of an interpretation which mimics an authentic structure. Finally, a review of other treatment options currently used at historic sites in the US illustrated that reconstruction is not the only interpretive method available, but for sites with the economic means it is one of the most rewarding methods in terms of interpretive and educational benefits and perceived visitor popularity.

The next chapter introduces five sites that utilize reconstructions to varying degrees to interpret the life of George Washington, one of the founding fathers of the nation and whose ideology was significant in the historic preservation movement of the country. By looking at these sites and their reconstructions, a fuller understanding of the implications and impact of this interpretive methodology will be apparent. The cultural biographies of the creation of and evidence for these reconstructions within the context of their historic site provide the data for an exploration of their creation, function and utilization. A discussion
of the reconstructions and their role in shaping a public perception of the past is undertaken in Chapter Five. It is hypothesized that by looking intently at a series of reconstructions one can fully understand the role reconstructions play in creating this "sense of place" so important for historic sites in the US and to analyze means by which the reconstructions might be assessed.
Chapter Four: *In Situ* Reconstructions at Five Sites Associated with George Washington

Introduction

The previous chapters introduced and discussed *in situ* reconstructions placed upon the site of their archaeological foundations. This interpretive treatment for non-extant features has a long and popular history in the US. This study also outlined how the US has culturally adopted the historic site as the most authentic spot in which to interpret the past. While three-dimensional reconstruction is not currently the only method of interpretation utilized at heritage sites to depict vanished structures and features, it is one of the most rewarding providing visitors with something easily understandable and tangible to view. It is also the most problematic because of the potential destruction to archaeological remains, the possibility that elements will have to be conjectured in the creation of a physical entity and because there is a probability that this creation will be mistaken for historic.

This chapter introduces a number of historic sites that have utilized reconstructions as means to interpret structures associated with George Washington. A detailed cultural biography of these reconstructions is presented which provides the foundation for an in-depth discussion of these reconstructions in Chapter Five. It is thought that these cultural biographies of the Washington reconstructions will provide the data needed to assess these reconstructions as to how well they portray a successful, accurate, and ethical sense of the past for visitors to historic sites.
George Washington

George Washington (Figure 1) is one of the most famous Americans, becoming famous during his lifetime. The most experienced native-born military officer in the colonies by the time he was 27 years old, Washington used this expertise to become leader of the Continental Army during the American Revolution. Elected a member of Virginia's House of Burgesses during the late 1750s and 1760s, his political career also included being elected to the Continental Congress, leading the Constitutional Convention in 1787, and serving as the first president of the United States during two consecutive terms (1789–1797). At the end of the Revolution and again after his second term as president, Washington resigned. Refusing to stay in control, he preferred to evoke Cincinnatus, the Roman warrior, and he returned to his beloved farm Mount Vernon. Relinquishing power,
combined with his military and political successes, propelled Washington to fame during his lifetime. George III, King of England during the American Revolution, called Washington "the greatest character of the age" because he chose to retire (quoted in Brookhiser 1997: 103). "First in the hearts of his countrymen," Washington, as the "indispensable man," was an iconic figure during the early years of the nation (Brookhiser 1997; Flexner 1969).

While these achievements are impressive, he is perhaps most remembered for his personal character, which was memorialized in the apocryphal stories published by Parson Weems (1918) shortly after Washington's death. Dove and Guernsey (1995) suggest that today Washington continues to represent virtue and strength and has been used to create and is identified with a national character of liberty and nationalism visible across many venues from politics to commercialism. They state his "persona is omnipresent" and "the image of George Washington has stood fixed as a point of common cultural reference, a multi-leveled symbol whose importance can now in a way be said to be self-justifying, an importance founded upon its very importance throughout our national history."

Washington and Preservation

At his death in 1799, mock funerals were held throughout America as mourning swept the nation. During his life visitors flocked to Mount Vernon to see the home of the revered leader and this trend continued after his death. Washington's fame increased during the first half of the 19th century, fed by the desire to, as historian
Jean Lee (2001: 255) details, "ease the transition from colonial to independent status, dilute deeply ingrained provincialism, and impart meaning and purpose to a nation born of revolution." By extension, Mount Vernon grew in significance during this time "as a repository of historical memory, site of emotional homage, and the nation's most sacred place" (Lee 2001). By the mid-1850s when the title to the plantation was transferred from the Washington family to the Mount Vernon Ladies' Association (MVLA), more than 10,000 people visited Washington's home each year (Lee 2001).

As the work of the Association influenced historic preservation, George Washington became the focus of multiple preservation projects. Historian Michael Kammen (1991: 260) suggests that Washington was the "sole name with sufficient national appeal to make historic preservation relatively easy during the second half of the nineteenth century" and this appeal caused numerous sites associated with Washington's life, family and extended family to be preserved. Among these early sites were Washington's headquarters in Newburgh, NY; Mary Washington House, Washington's Birthplace, VA; Valley Forge, PA (Hosmer 1965).

Likewise, anniversaries of events associated with Washington's life were celebrated, such as the centennial of Revolutionary battles, his inauguration, and the bicentennial of his birth, and these anniversaries provided inspiration for the preservation, restoration, and reconstruction of places associated with the mythical hero. The mere association of a site with Washington, as at Colonial
Williamsburg, was often enough to legitimize preservation efforts. Many structures were saved through a cursory association with the first president and "Washington slept here" has become a joke along the Eastern seaboard as numerous homes use this fleeting relationship with him to justify their significance. Even a stable where Washington's horse slept was preserved in New York (Marling 1988).

The bicentennial of Washington's birth in 1932 served as the catalyst for a plethora of scholarly and preservation-related initiatives. Approved by a joint resolution of Congress in 1924, the George Washington Bicentennial Commission worked for the next 8 years to promote Washington, culminating between his February birthday and December 1932. This broad initiative sponsored and stimulated numerous publications, events, preservation of sites, and reconstructions, associated with Washington. This event occurred at a time when the social fabric of American life was under great stress and historic sites changed to accommodate new desires among the traveling public. Therefore reconstructions were fabricated during this bicentennial to interpret Washington's life and enhance the sites' appeal to tourists and to increase the educational aspect of historic sites associated with Washington (Marling 1988: 325-364).

In the 150 years since the inception of the MVLA, more than 75 sites associated directly with Washington's life were preserved and the majority of these are open to the public as parks and historic houses. Washington's residence in Barbados,
during his sole excursion outside the US, is preserved as a historic house museum, and two sites in England (Washington Old Hall, Tyne and Wear; Sulgrave Manor, Northamptonshire), where Washington's ancestors lived, are tourist venues. This broad international appeal is unique among American founding fathers and a testament to the broader ideals of character, liberty, and public service that George Washington symbolizes.

Washington Reconstructions – The Case Studies

It is not surprising that so many of the places where Washington lived are preserved and open to the public. The idea of the historic house museum is American in origin, evolving during the 19th century and led by women's organizations which were focused on creating homogeneity from an increasingly diverse population. Historian Seth Bruggeman (2006: 15) notes that during the early years of the historic house movement it "dedicated itself to sites associated with George Washington" as the premier leader of the early republic. These organizations focused upon the house as a unifying concept (Lindgren 1993; West 1999: 2). The architectural historian, Richard Guy Wilson (2002: 14), recently noted, "for Americans the house has always been especially important. It is one of our heritages from England, and in contrast to many other cultures and nations we tend to invest special status to the house and to tell our story through buildings that people have used as residences. As a culture we are unique in our fetish of the house and also the tremendous number of 'historical houses' open to the public."
Understanding the special meaning that home holds for Americans, this study looks at places where Washington lived, as a civilian or during military service. Of these, only sites with reconstructed elements aided by archaeological evidence and built on the remains of their original foundations fit the criteria for examination: Mount Vernon, George Washington's Gristmill and Distillery, Washington's Birthplace, Valley Forge and Fort Necessity. By restricting the study to sites where Washington lived or served in the military, it is hoped that the effects of interpretive narrative and theme upon decisions to reconstruct, and of

Figure 2. Location of the case studies.
reconstructions upon our collective notion of an individual, and by extension on our perceptions of the past, will be ascertained.

Five sites fit the stated criteria: Mount Vernon, George Washington's Gristmill, Washington's Birthplace, Valley Forge, and Fort Necessity (Figure 2). Because of the national prominence of these five sites in interpreting America's "most revered leader," the narrative of their development and specifically the history of their reconstructions and reconstruction policies, provide a foundation for understanding how and why American historic sites choose to rebuild their lost architecture to aid interpretation and the visitor experience. By looking more closely at these reconstructions and the sites' policies, it illuminates how the creations of these reconstructions were motivated by contemporary perceptions of the past and in turn a reconstruction's presence at a site provides a tangible entity serving to illustrate and validate a visitor's image of the past.

National Park Service historian Verne Chatelain (1936: 6), in a position paper written for presentation to the first meeting of the Advisory Board of the National Park Service, discussed the power of historic sites. Using George Washington and sites associated with his life as the example of how historic sites can relate not only objective historical facts, but also "more subjective aspects of history." Chatelain (1936: 6) discussed how these places offer "a clearer appreciation of the real Washington through analysis of the physical elements constituting the background of the first American President...In weighing these physical elements
in connection with written sources, the latter have taken on a new meaning and a clearer notion of the real Washington has been the result."

I have worked at Mount Vernon for almost two decades directing the permanent archaeological research program. Additionally, as part of my employment, I have directed the recent archaeological survey and historical research of Washington's Gristmill and Distillery and the research and mitigation of the Distillery. I served as a member of the reconstruction teams that evaluated evidence and designed reconstructions of the Distillery and for the Dung Repository and Blacksmiths' Shop at Mount Vernon. I also conducted analysis (Pogue and White 1994) of a presumed slave quarter at Washington's Birthplace National Monument. My intimate knowledge and close relationship with these Washington sites and with the process of creating reconstructions permits insights into this topic which would otherwise be impossible.

Today, three of the sites in this study, Fort Necessity, Washington's Birthplace, and Valley Forge, are units of the National Park System. The reconstruction policy of the NPS was outlined in Chapter One, but because these reconstructions were initiated or constructed by prior owners, individualized site policies, including individual reconstruction histories, are told below as the background for further discussion. These sites illustrate the fact that superintendents and local citizens favoring reconstructions to enhance economic and tourist potential at historic sites
can overrule NPS policy. The two privately held sites' reconstruction policies are discussed in some detail along with their reconstruction histories.

Mount Vernon

Located along the Potomac River 10 miles south of Washington, DC, Mount Vernon, the privately-owned site of George Washington's adult home, today welcomes almost 1,000,000 visitors annually, making it one of the most popular historic houses in the US (Figure 3). Comprising approximately 33 ladies from across the nation, the MVLA does not accept any federal or state tax-dollars, something unique for a historic site. This self-sufficient policy keeps them somewhat insulated from political machinations, allowing the site to maintain and promote Washington with less public scrutiny and outside review than other publicly-funded historic sites. Their annual budget of 20 million dollars is supported primarily through site revenue and private donations (MVLA 2006).

Figure 3. Mount Vernon, George Washington's home in VA. Courtesy MVLA.
Augustine Washington moved his family to Little Hunting Creek Plantation in 1735 when George was three years old. The family lived there until they moved to the Ferry Farm in 1739. In the 1740s, George Washington was a frequent visitor to the property, inherited by his eldest half brother Lawrence upon the death of Augustine in 1743. George rented the property from Lawrence's widow in 1754 and inherited it outright when the widow died in 1762. Between 1775 and the 1780s, Washington remodeled the Mansion and transformed the mid-18th-century landscape into a naturalistic seat based heavily upon English design. The property remained in the Washington family after the death of Martha, George's wife, proceeding through three generations of collateral heirs prior to purchase by the MVLA in 1858 (MVLA n.d.).

The MVLA owns 550 acres of Washington's original 8,000-acre plantation. Approximately 50 acres are open to the public; the majority of the property is wooded and serves as a buffer to the development which today surrounds Washington's home (MVLA n.d.; Figure 4). During the mid-1990s, the MVLA entered an agreement with the Commonwealth of Virginia to gradually assume control and eventual title to Washington's Mill Historical State Park, three miles west of Mount Vernon. This seven-acre property will be deeded to the MVLA in 2008 (MVLA 1995; Pogue 2007).

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1 Lawrence renamed the plantation Mount Vernon in honor of Admiral Edward Vernon with whom he served under in the battle of Cartagena.
With only two owners during its Anglo-American history, the Washington family and the MVLA, the property has had an extremely stable existence reflected in the level of surviving structures from Washington's era. The core of the estate is known as the historic area and comprises the Mansion, and 16 surviving 18th-century structures.\(^2\) Within the historic area there are currently three reconstructions, the Greenhouse / Slave Quarter, the Repository for Dung and the Coach House (Figure 5). Although it is not scheduled for reconstruction until 2008, the Blacksmiths' Shop is included in this study since the MVLA has

\(^2\) For purposes of this study the surviving structures are the Mansion, Spinning House, Salt House, Gardener's House, Servants' Hall, Kitchen, Storehouse, Smoke House, Wash House, Stable, Ice House, Old Tomb, North and South Necessaries, and Upper and Lower Seed Houses. There is some debate as to the degree of integrity of the Necessaries, Seed Houses and Icehouse, as these structures were heavily restored during the Association period. They did not, however, completely disappear from the landscape for a substantial period of time. Two buildings within the historic area, the New Tomb and the North Lane Icehouse, are 19th-century structures while the old Museum building was constructed in the 1920s and therefore not included in this study.
committed to returning this structure to the landscape. A fifth reconstruction recently completed by the MVLA, the Distillery, is on land currently leased to Mount Vernon and discussed separately.

Figure 5. Reconstructions at Mount Vernon -- a. Coach House; b. Repository for Dung; c. Greenhouse / Slave Quarter (only the Greenhouse is shown) and d. Blacksmiths' Shop – are shown on Samuel Vaughan's 1787 plan. Courtesy MVLA.
Another important factor contributing to the stability and integrity of Mount Vernon is that two resident directors were at the helm for 91 of its first 147 years as a museum. Harrison Dodge assumed the title of superintendent in 1885 and served until 1937, 52 years (Johnson 1991: 73-74). During much of his tenure he focused on basic maintenance of the mansion, Dodge directed the reconstruction of the Coach House during the 1890s.

Charles Cecil Wall first came to Mount Vernon in 1929, formally becoming resident director upon Dodge's death. Wall continued Dodge's overall conservative approach to restoring or reconstructing the plantation. During his leadership the plantation did undertake a reconstruction of Washington's Greenhouse / Slave Quarters, and as part of that project a reconstruction study for the Blacksmiths' Shop attests, Wall had definite ideas about how Washington should be presented to the public and fully understood the power of reconstructions in shaping perceptions.

Two individuals, Morley Jeffers Williams and Walter Macomber, helped shape the 20th century reconstructions at Mount Vernon. Williams, a landscape architect at Harvard University, arrived at Mount Vernon in 1931 to investigate the landscape as part of a larger study into southern colonial plantations and gardens. In 1936 he accepted a full-time position as the Director of Research and Restoration for the

3 The Ladies' Association, led by the elected regent, holds title to Mount Vernon and acts as their board of directors. Today, Mount Vernon is operated by a CEO who serves as the director of the organization. During the 19th century, this position was called superintendent, during most of the 20th century it was resident director.
Association, a position he held until 1939 when he was not selected to succeed Harrison Dodge (Beamon 2000: 4-5).

In the mid-1930s, Morley Williams focused on a 1787 plan of the estate drawn by Samuel Vaughan, an English admirer of Washington. Vaughan's plan showed a number of non-extant structures, including the Dung Repository and Blacksmiths' Shop. Williams chose these non-extant sites to study, not only to learn more about the evolution of the plantation, but also because he interpreted his newly created role as Director of Research and Restoration as being "prepared to supervise restorations, supervise them as to authenticity, as to techniques...we are trying to accumulate data so the place can be put back as it was" (MVLA 1937: 39-40). Clearly, Williams hoped to restore missing features important to Washington's plantation and he mimics Cunningham's charge that the plantation could be put back as it was when Washington was alive.

While at Mount Vernon, Williams systematically tested for structural foundations, using good archaeological techniques for the time period and selecting areas based upon documentary research. Although not trained as an archaeologist, he recognized soil stratigraphy as well as post holes, made detailed drawings to record his excavations and these notes remain an important historical resource. He incorporated archaeological discoveries into his thesis of Mount Vernon's evolution and designed a reconstruction of the Greenhouse / Slave Quarter (Pogue 1988).
Arriving at Mount Vernon in 1941, Walter Macomber, a historical architect, had received training during the restoration of Williamsburg. While never in residence full-time, Macomber served as the Restoration Architect until resigning in 1974. During his tenure with the Association, Macomber designed and constructed the Greenhouse / Slave Quarter, and was the major proponent for the proposed reconstruction of the Blacksmiths' Shop. His extensive research included three excavations at the site (Pogue 1988; White 2004).

While both Williams and Macomber utilized archaeological remains in their studies of the plantation neither was trained as an archaeologist. Macomber's archaeological skills were more rudimentary than Williams, who left behind scale drawings of the areas he explored, as well as notes about the excavations. Williams had a more sophisticated understanding of archaeological method and techniques while Macomber's projects, especially the Greenhouse / Slave Quarter did not utilize archaeology enough to either gather evidence or recover data prior to the destruction of the site. Both gentlemen valued physical evidence over other sources (Beamon 2000; Pogue 1988; White 2004). The MVLA contracted with the Commonwealth of Virginia in the mid-1980s to survey and assess the plantation and based upon their recommendations a permanent historical archaeology department was created in 1987 (Pogue 1988).

Mount Vernon uses 1799, the year of Washington's death, as its interpretive period and focuses on George Washington and his life, especially his domestic life, as the
main interpretive theme. At times this narrow interpretive period has created issues for the restoration of the plantation, as detailed in the discussion of the Blacksmiths' Shop. Beginning in 1991, with a grant from the W.K. Kellogg Foundation, the MVLA initiated George Washington: Pioneer Farmer. This new interpretive theme focuses on Washington and his farming initiatives with the centerpiece a working replica, or new construction not on the original site, of Washington's innovative 16-sided treading barn complex built outside the historic area (Rees 1992). The initiative also served to move some interpretive focus out of the Mansion and onto an aspect of Washington's life that his domestic seat can vividly address. The Pioneer Farmer initiative was the catalyst for efforts to reconstruction the Dung Repository, Distillery, and Blacksmiths' Shop.

Mount Vernon's Reconstruction Policy

In a 1955 review of the restoration efforts of the Mount Vernon Ladies' Association, resident director Charles Wall identified two documents as instrumental in guiding the Ladies' efforts to restore George Washington's home during the initial years of their stewardship (Wall 1955). These documents: the Charter and the Farewell Address of first Regent Ann Pamela Cunningham, fail to mention restoration or reconstruction, yet provide the theoretical foundation for all subsequent restoration work. The Charter (Virginia General Assembly 1858) allowed the organization to "purchase, hold and improve" the newly acquired plantation. The Regent's Address strongly argued that the property should be maintained "in the same condition as when left" by Washington (MVLA 1953: 5).
Cunningham continued setting forth the Ladies' stewardship mission "the mansion and grounds around it should be religiously guarded from change – should be kept as Washington left them" (MVLA 1953: 5).

With historic preservation in its infancy in the US, and virtually no specialists or precedent to guide their work, the Ladies made a number of significant decisions regarding the preservation of the plantation during these early years. They resisted suggestions to abandon the plantation outbuildings and tear them down, relying on a conservative stewardship ethic based upon evidence when making decisions. This ensured that changes were not made arbitrarily and restoration and reconstruction were carried out in a deliberate manner and not contrary to evidence (Wall 1955: 3). The basic tenets of this conservative stewardship policy remain in force today.

The conventional wisdom guiding proposed reconstructions at Mount Vernon relies on three underlying tenets. To be eligible for reconstruction a vanished structure must have stood in 1799, the interpretive period. Second, a high level of evidence from a variety of sources must exist that details the appearance of the structure. Finally, the missing structure must somehow fit into the Association's interpretive plans, advancing a perception of George Washington or his vision for the Mount Vernon landscape, being advocated at the time of reconstruction (Wall 1955). Because all three criteria must be met in order for a reconstruction to occur, this unwritten policy is quite conservative in practice.
In discussing the efforts to rebuild missing elements, Wall refers to "the art of the possible" (Wall 1955: 4). Mount Vernon, according to Wall, attempts to show the plantation at 1799, as authentically and effectively as can be done yet there are a host of outstanding issues that make a complete reconstruction impossible (Wall 1955: 6). Factors such as attendance, security, fiscal resources, and maintenance impose some of the boundaries by which the site is able, or not able, to embark on the reconstruction of specific elements. As the strategic interpretive vision for the estate changes, the ability to reconstruct a building, or series of buildings, is constantly evolving. Reconstruction decisions are more complex than merely knowing that a building was present and what it looked like. These decisions often play upon multiple factors and in many cases, as the Blacksmiths' Shop or the Distillery cultural biographies suggest, these are fluid, subtle arguments.

Miss Cunningham's mandate, to maintain the grounds as Washington left them, idealistically implied that the plantation had frozen with Washington's death in 1799, and that the landscape was "in the same condition" as when the General died. The conservative restoration approach and naïve assumption about the property was fortunate because very few changes were made initially. Cultural landscapes are fluid entities and the property purchased more than 50 years after Washington's death had not been frozen in time. While acknowledging that the physical characteristics of historic landscapes and sites are fluid, Mount Vernon's restoration, interpretive and reconstruction policies present the cultural landscape as if Washington himself was still proprietor.
Mount Vernon's 20th-century landscape is a shrine to George Washington, rather than a fluid amalgamation showing all the entities that influenced the built environment. Elements which date to a later period are removed by the Association in the effort to present a historic site restored to the year 1799. This process of showing one point in time creates a misleading historic site which can become idealized and a memorialized landscape because the complexity and nuances of the landscape's evolution are missing.

Wall proposed scale models to show conjectured features alongside existing ones, and to address the evolution of the landscape from the earliest Washington occupant through the last (Wall 1955: 5-6). He felt these could be easily revised with new evidence and show conflicting evidence. Mount Vernon has never embraced this interpretive technique, preferring to show one full-scale vision of the estate with reconstructed buildings present that meet Wall's criteria of "possible." Undoubtedly, many features are missing from the plantation that the public experiences, either because of evidence, funding, interpretive relevancy, safety, or modern conveniences. Likewise, there is also no attempt to show alternative interpretations within the reconstructed features. Just as the site is presented as a static property, the presentation is also authoritarian with no means to present alternative views.

Mount Vernon's static approach is common; numerous historic sites within the US are interpreted with a rigid view of the past. While the administrative decision to
completely reconstruct brings a host of interpretive benefits, it fosters this static, authoritarian presentation style. Deciding what period to reconstruct is a conscious decision made by administrators, in part because it simplifies interpretation and is easier for the visitor to comprehend. This facilitates interpretation but it assumes that the visitor is not capable of comprehending a more complex story. Sites such as Mount Vernon should do something to convey that they are interpretations of the past and not snapshots depicting an authentic past. Exhibits or a deeper internet presence are ways to convey these ideas while presenting only the stated significant narrative physically at a site.

While Mount Vernon is unique with the survival of so many historic structures within one estate, the MVLA uses reconstructions to fill in missing elements and gaps within the landscape. This is in keeping with Miss Cunningham's mandate, because she wanted to show the plantation as it was when Washington walked the lanes. To restore or reconstruct features makes his presence that much closer. Reconstructions are not responsible for depicting the majority of Washington's home life, but the impact of these new elements is the same as at other sites. The critical histories of Mount Vernon's reconstructions are interesting as they embellish and augment an authentic past, rather than create an air of false authenticity.

Wall acknowledged that as preservation practice became more sophisticated, much of Mount Vernon's early restoration efforts had to be redone. In some cases
multiple generations of reconstructions have graced the landscape reflecting a maturation of policy, refinement of research, and increased comprehension of evidence (Wall 1955: 3-4). The Greenhouse at Mount Vernon is a good example of this with several reconstruction episodes. Fort Necessity and the cabins at Valley Forge have also had multiple iterations of reconstructions reflecting evolving levels of research and illustrating how depictions of the past are a fluid contemporary construct.

The Reconstruction Projects

Coach House

There is very little documentation about the 1890's reconstruction of the Coach House, the MVLA's first reconstruction (Figure 6). Its rebuilding marks a decision by the Association to combine sources of evidence to fill in a major structure absent from the interpreted landscape of 1799. The documentation reflects that physical evidence, the brick foundation visible while preparing the site, had a significant impact upon the resulting structure. This is perhaps the first documented case of an "archaeological" reconstruction in

Figure 6. The Coach House is one of the earliest in situ reconstructions in the US. Courtesy MVLA.
the Chesapeake region and the use of reconstruction by the MVLA during this period is atypical of the 19th-century women's led preservation movement as discussed in Chapter Three (Lindgren 1993; Pitcaithley 1989).

Having burned sometime between 1855 and 1858, and subsequently been demolished, Mount Vernon's Coach House was rebuilt on its original foundations at the foot of the south lane in 1894 (Kegerise 2001: 4). The reconstruction was suggested in 1893 by Michigan's Vice Regent, Mrs. Elizabeth Rathbone, who raised the necessary funds. That Superintendent Dodge acted upon it the following year with very little discussion among the Ladies or the staff suggests the act of reconstructing was not controversial, but rather a logical step, per Miss Cunningham's mandate. A mid-19th-century corn house located on the site was quickly removed so construction could begin (Kegerise 2001: 5).

Dodge recorded that with no picture of the original building he was "restricted to tradition for plan" while the excavated foundation showed the location and size of the structure (Kegerise 2001: 5). Dodge reported to Council "enough of the original brick foundation remained to indicate clearly the ground plan of the old building. For the general form of superstructure I made diligent inquiry of persons who remembered the original...and followed closely what they could tell me about its appearance" (MVLA 1894: 28). The fact that less than 40 years separated the destruction with reconstruction, and that many of Washington's outbuildings were very similar, proved fortuitous for the MVLA.
The reconstructed Coach House today houses a riding chair. The sign located at the building prior to 2005 mentioned it was a reconstruction; the present sign focuses on the riding chair stored inside. It is my opinion from conducting training sessions with the interpretive staff that because of this reconstruction's great age very few of them seem to realize it is rebuilt. There is no discussion at the site of the corn house demolished during the reconstruction, or of the fire that destroyed the original Coach House.

Stercorary

The decision to reconstruct George Washington's 1787 Stercorary, or Dung Repository, illustrates how the value of a potential reconstruction fluctuates with interpretive initiatives (Figure 7). It is also shows how reconstructions create static interpretation at historic sites rather than exhibiting the fluid nature inherent in a cultural landscape.

In 1787, while transforming his tobacco plantation to an efficient and productive mixed grain farm, Washington built an open-sided shed for mixing manure, soapsuds, trash and other organic material into fertilizer. This structure is believed to be the

Figure 7. The Repository for Dung. Courtesy MVLA.
first enclosure to process manure into fertilizer in America or Western Europe (Pogue 1994).

Figure 8. Richard Peters's 1808 plan of a Stercorary. Courtesy MVLA.

The site of the Dung Repository was studied in 1935 by Morley Williams and from 1993-1995 by the current archaeological program. There is some written documentation about the construction of the building in 1787, but none concerning its destruction. Plans suggest it did not survive into the mid-19th century.

Whether the building was standing in 1799 was not known prior to the most recent
excavation. The utilitarian function of the building did not make it a strong candidate for reconstruction until the Association embarked on the George Washington: Pioneer Farmer initiative renewing interest in the site of Washington's fertilizer operation (Pogue 1994).

Williams excavated a series of ditches discovering the cobblestone floor and the masonry gable walls of the long narrow building. He interpreted the structure as having a continuous brick foundation, conjecturing this feature along the long southern wall. His plan records the southern wall as being robbed of extant brick, implying that he did not see or recover masonry material along this face (Pogue 1994: 12). The 1990's excavations, led by Dennis Pogue, discovered the physical remnants of the building seen by Williams, evidence of his excavation, and discovered two generations of postholes and molds along the southern façade, just south of the cobblestone floor. Although the exact date and cause of the Dung Repository's demise is still not known, artifacts discovered in the fill of the building, combined with the multi-generational posts, strongly suggest it survived into the early decades of 19th century, fulfilling the Estate's 1799 test.

Documentary research identified a drawing of a stercorary published in 1808 providing missing structural details for the building (Figure 8). The drawing

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4 While a probate inventory was prepared upon Washington's death, utilitarian, post-in-ground buildings, like the Blacksmiths' Shop and Stercorary, were not recorded. Bushrod Washington, Washington's heir, purchased a fire insurance policy in 1803, renewed in 1805. A structure needed a value of $100.00 or more to be insured. Neither of these buildings met that threshold. For many years their absence from these documents was perceived as implying their nonexistence on the landscape in 1799, rather than being excluded due to their ephemeral nature.
illustrates a continuous brick foundation, as Williams hypothesized for the Stercorary. Pogue interpreted the building as being a hybrid of masonry and earth fast construction, thereby accounting for the post-in-ground evidence and the lack of masonry along the south wall. While this combination of construction types is not common, he felt the practical nature of the construction was not surprising given the utilitarian function of the building (Pogue 1994).

The Stercorary's practicality is most evident in its placement on the plantation landscape. It was located south of the Mansion, adjacent to the ha-ha wall that separated private Washington family space from the rest of the plantation workspace. The building incorporated the brick ha-ha as its north wall. It was located within the ditch feature that served as the outer component of the ha-ha. Brick gable walls allowed the building to be within the ditch and not have the liquid compost leak out. The southern wall was earth and on this side the roof was supported by posts set into the ground, rather than on masonry as on the other three sides. It was seated across the south lane from the stable, the prime source of compost material. This location was a symmetrical anchor to the post-in-ground Blacksmiths' Shop located at the same spot on the north lane (Pogue 1994).

The Dung Repository was not excavated during the 1990s because reconstruction was preordained. Rather, Pogue initiated the excavation to learn more about the structure's construction and date of demise but as details of the building became clear, and historical research uncovered additional documentation, there was an
understanding that one result of the work could be reconstruction. This did not alter how the work was approached, but this encouraged the archaeologists to begin to think about structural details such as the roof and walls, which the excavation did not inform. The Ladies approved the reconstruction in 1996, well after excavation, as a complement to the Pioneer Farmer agricultural initiative. This reconstruction, completed in 2001, was not controversial and there was consensus among the staff and board that the reconstruction could be carried out to a high degree of accuracy with both the physical, documentary and secondary evidence providing evidence.

The building incorporates the 18th-century cobblestone floor and sections of original brickwork, providing a spot to discuss Washington's agricultural experiments, especially the production of fertilizer. It is also a tangible part of the farm story within the historic area, acting as a "commercial" for the Pioneer Farm exhibit located down a hill at the banks of the Potomac River. Unlike the Blacksmiths' Shop, the Dung Repository was not considered a candidate for reconstruction prior to the development of the Pioneer Farm because of its function and unknown destruction date. To place such a utilitarian, ephemeral, potentially noxious and odorous building within the picturesque, manicured and designed landscape, the Association had to focus specifically on the subject of farming and portray Washington as a leading figure within American agriculture.
During excavation archaeological staff interpreted their work for the public and that they were in the process of recovering details to learn more about the building's function, layout and age, possibly to reconstruct the building upon the landscape. Today, the site is interpreted with a small sign that acknowledges the building is reconstructed. Occasionally a staff interpreter will be posted near the site. Visitors are informed of the modern nature of the building, told which features are original, but not told about the evidence used to create the modern building. Mid-19th-century plans of the estate show a corn house at this location and the 1990's excavations found evidence of this post-in-ground building, although very little is known about the building or its demise (Pogue 1994). The signage does not mention the subsequent corn house, part of the post-Washington occupation, in keeping with Mount Vernon's interpretation of one moment in time. Visitors learn the building is a replica, but not about the history of its demise and reconstruction. The visitor is not provided information to assess the possibilities of multiple points of view inherent within the landscape.

Greenhouse / Slave Quarters

George Washington returned to Mount Vernon after the Revolutionary War and he continued a reorganization of his plantation begun before the outbreak of hostilities. In 1787, he completed a brick two-story Greenhouse on the northern side of his Upper or Flower Garden (Figure 9). This structure incorporated large glass windows facing the Garden and service rooms facing the lane to the north, and after 1792, brick slave quarters to the east and west. The last major building
constructed during Washington's lifetime, it was destroyed by fire in 1835. Ruins of the walls and chimneys survived upon the landscape throughout much of the 19th century.

When the current version of this building was reconstructed in the early 1950s, it was the third structure to stand on the site. With the demise of Washington's building, the Ladies sought to rebuild a Greenhouse early in their ownership, placing one in the same vicinity in 1869. This structure was remodeled and wings, mimicking Washington's slave quarters, were added in the 1890s. These wings served as quarters for the Ladies when they convened for their annual councils.

As construction began on a replacement of this building in 1896, Superintendent Dodge wrote the Vice Regent for Ohio that he had found the foundations of Washington's Greenhouse, brick flues, suggesting there was a heating system incorporated into the Greenhouse, and a chimney. The original brickwork was almost exactly where Dodge planned to place the new foundation so he was able to tell the Vice Regent "You will be pleased to learn that this will be a 'restoration' and not an entirely new feature" (Dodge 1896). Construction destroyed all
evidence of the flues and heating system so future iterations had no physical evidence of this feature to study (Macomber 1941a).
The 1896 Greenhouse lasted almost half a century although the Association began discussions about constructing a more accurate reconstruction much earlier. In 1915, landscape architect Charles Sargent advised the Regent to remove the "modern Greenhouse from Mt. Vernon & giving up sale of seed -- Not in keeping with Washington's idea of dignity & propriety" (Sargent 1915). While the Association has never given up the sale of plants, it did begin to address the inaccurate structure in 1935 when Morley Williams was engaged to research the original Greenhouse.

Morley Williams conducted documentary research on the 18th-century Greenhouse / Slave Quarter and submitted a proposed architectural plan. His drawing was based in large part on an 1805 fire insurance policy that contained a detailed drawing of the original Greenhouse (Figure 10). This document was not discovered until the early 20th century. The Ladies anticipated another building upon this site because the 1896 structure was in poor condition and being a "modern" structure the board did not want to spend funds to repair it. The Ladies preferred rebuilding the Greenhouse / Slave Quarter as accurately as possible using all available evidence because the structure was located in the exhibition area (MVLA 1941: 29-30).

In a report to the Buildings Committee, just days before the US entered World War II, Walter Macomber submitted a report to the Regent outlining inaccuracies in the current Greenhouse and detailing his planned reconstruction. His report included
provisions for limited archaeological testing to assess any structural remains (Macomber 1941b). During fieldwork, conducted in 1941, the keystone for the center arch of the Greenhouse windows was recovered and this artifact was later incorporated in the reconstruction.

Macomber identified discrepancies between the physical evidence and Washington's documentary evidence. On the one hand there was a plan drawn by Washington of his proposed Greenhouse. Here, Washington showed the Greenhouse jutting beyond the slave quarters on both the north and south facades. He also specified the Greenhouse measure 10' north / south. Macomber's limited testing found the footing of the Greenhouse was 14' and that no part of the building protruded to the north (MVLA 1941: 29-30). Macomber stated when reconciling discrepancies in data he was "inclined to consider the existing foundation evidence as conclusive rather than the written description." (Macomber 1941a).

Despite the Ladies' support for a new reconstruction of the Greenhouse / Slave Quarters, the advent of World War II postponed the project until 1949. Work finally commenced with the demolition of the 1896 Greenhouse and Quarters. Macomber reported to the Board that "a disappointing amount of original brickwork and information" was discovered but he did find "within a very few inches, the dimensions and plan of the buildings built by George Washington" (Macomber 1949). These letters and report are the only surviving records of the
investigation of this space. Although Macomber used archaeological excavation, he did not understand or utilize archaeological methodology or adequately record his fieldwork.

According to Macomber's study, the results of the preliminary work in 1941 were valid. The dimensions of the Greenhouse were slightly larger than initially sketched by Washington, and the foundation was flush along the north side, jutting past the quarters on the south, or garden side. Doors into the Greenhouse on the east and west ends necessitated this change, and apparently Washington made it early, as the brick foundations showed evidence of rebuilding during construction (Macomber 1949). Assumptions made during the reconstruction included the location of the fireplace that heated the Greenhouse, which of the two rooms north of the Greenhouse was the shoemaker's room and which was the stove room, and the presence of habitable rooms above these two rooms. Access to the second story of the Greenhouse was also conjectured. Brick walls provided divisions within the slave quarter space, creating two rooms in each wing. The footings for these were seen archaeologically. No hearths or chimneys were found in the Quarters, and these were reconstructed as Washington drew, and based upon the insurance document (Meadows 1990a). Changes made to the structure for its use by the museum included doors into the east quarter from the garden, and through the gable end of the west quarter, facilitating a sales area and space for the gardener (MVLA 1950: 95). The minutes of the Ladies' Council meeting in 1950
report the reconstruction was underway, the building's dimension and that much of the plan was based upon archaeology (MVLA 1950: 95).

In late 1951, while obtaining a photograph of the 1805 insurance policy, upon which much of the reconstruction was based, Association researcher, John Riggs (1951), discovered an earlier 1803 insurance policy. This policy had been mislabeled Mount Vermont, in the insurance company's records (Figures 10 and 11). The new policy was nearly identical to the 1805 policy, showing virtually the same façade of the Greenhouse. The exception was the arched central window shown only on the 1805 policy. Riggs (1952) noted this feature was original since the keystone was excavated in 1941 and incorporated in the reconstruction. The 1803 plan also depicted windows in the south walls of the slave quarters and the dimensions were listed as 24 x 42 feet, while in 1805 they were 28 x 42 feet. Having already completed the reconstruction based on the 1805 dimensions and archaeological evidence, the 1803 dimensions were deemed inaccurate (Riggs 1952). There was time to incorporate windows in the slave quarter facing the garden.

Upon completion in 1951, the Greenhouse was opened to the public, but two rooms in the slave quarters intended as interpreted space did not open. Their furnishing and interpretation spurred a contentious internal debate for the next decade centered upon how many people lived in these rooms during the 18th century and the quality of their belongings. The historical documentation of the
Quarters referred to "building births," a term Macomber questioned early in the reconstruction (Macomber 1949: 4-5). He interpreted births as wooden beds upon brick foundations, because the documents recorded an enslaved bricklayer built them. While Macomber felt the term referred to beds, others suggested 'birth'
could also mean rooms and proposed segregated sleeping rooms and communal cooking space (Meadows 1990b; Morse 1959). Finally, in 1962, staff on opposing sides of the argument compromised and the west quarters was opened to the public, with the bunks as originally designed by Macomber, while the second space intended for interpretation was converted into a museum (Meadows 1990b:

Figure 12. The reconstructed bunks in the Green house Slave Quarters. Courtesy MVLA.
3). Longtime curator Christine Meadows (1990b) reported in 1990 that based upon current scholarship the bunks are too refined, although they remain in place today (Figure 12).

Today, there is a sign outside the one interpreted slave quarter space which mentions the reconstruction. It discusses an enslaved nuclear family with nine children. The sign implies that this family were the only inhabitants living in this room. In actuality, there is no evidence to suggest who lived in a specific space, only that in the 1790s Washington's manager said that the new quarters were adequate to house all the slaves living on the Mansion House Farm, about 64 individuals (Macomber 1953: 26). By interpreting a large family in this room, the Association avoids the issue that multiple families and unrelated people probably lived communally. The Association has continued to avoid these issues because they reflect poorly upon George Washington's image and how the organization seeks to interpret him, and they are counter to what most visitors feel is a proper or accepted form of habitation (Meadows 1990a, 1990b).

The Association also avoids depicting the overwhelming numbers of enslaved African Americans present at Mount Vernon during the 18th century by only showing one slave quarter space when there were four in this building. There is some discussion in returning another room to interpreted use but no date for this to be accomplished. In the 18th century, this portion of Mount Vernon housed approximately 64 individuals. Today, only 11 are interpreted as living in this slave
quarter. If the Association really chose to interpret Washington accurately and his role as a slave owner it would actively show all four rooms in the Greenhouse / Slave Quarter, as well as the auxiliary spaces where it is thought slaves lived, such as in the attics of outbuildings and in corners of the Mansion. Interpretations that reflect positively on Washington, such as his role in the agricultural foundations of the nation, are told in more detail and more actively at the museum while potentially controversial narratives, such as slavery, are not as actively pursued within reconstructed spaces. Adaptive reuse of reconstructed spaces is an appalling use of this expensive investment that usually destroys authentic resources.

Treatment of the reconstructed Greenhouse / Slave Quarter is also in keeping with a historic building rather than a modern interpretive stage. Barriers keep visitors from venturing too far inside the rooms, presumable to guard against theft or damage to the furnishings. For many years a small fire smoldered in the quarter's fireplace during the winter, providing both heat and smell, giving the impression that this was a living space. This practice was stopped because of the fear of fire within the historic area, although the building is not physically near any authentic buildings. Interpreters routinely mention that the building was reconstructed, in part because it incorporates brick from the White House and this trivia is somehow deemed significant to impart to visitors. But the education, restoration, and curatorial staff do not embrace the space as active interpretive space, but rather utilize it in the same passive way that they use the original buildings.
The Association recently completed a replica of an outlying slave's quarters near the Pioneer Farm exhibit. This space is intended to be used as living history space where visitors can touch and use the furnishings and interact with staff maintaining a first-person persona. The Association could do this same level of interactive interpretation at the Greenhouse / Slave Quarter for the house slaves, but this space is not thought of as new space, because it sits within a core of original buildings. The juxtaposition between the differences in interpretation at these two slave quarters also suggests that the MVLA prefers to engage visitors in a dynamic dialogue about slavery in a peripheral setting rather than within the core of the plantation, in view of the Mansion.

In these three cases, the detailed evidence, archaeological, historical, and anecdotal, provided substantial support to guide the appearance of the reconstructions. Likewise, there was no doubt as to the structures' existence in the target year of 1799. Finally, the placement of each structure fit into the larger interpretive goals of the Ladies' Association. The Coach House completed a line of outbuildings. The Greenhouse / Slave Quarters provided the focal point to Washington's formal gardens, although the Ladies were less cohesive in their support of the quarter's portion of the building. The Storcorary was an important agricultural component in the core of the plantation at a period when Washington's agricultural pursuits were being actively researched, interpreted and promoted. While the Coach House and Greenhouse / Slave Quarter reconstructions could have utilized more archaeological research to inform the reconstructions, they are
still considered successful in light of current research; the Stercorary used extensive archaeological work. Each of these projects fit successfully within the three criteria guiding reconstructions at Mount Vernon.

**Blacksmiths' Shop**

The saga of Mount Vernon's Blacksmiths' Shop, a battle waged for more than half a century, illustrates what Mount Vernon Director Cecil Wall termed the "art of the possible" that defines much of the pragmatism surrounding reconstruction decisions at historic sites (Wall 1955: 5). The critical history of the Blacksmiths' Shop's is an example of how evidence, period of significance, and cultural expectations of how museums should be interpreted are manipulated by individuals or groups to reinforce a preconceived notion about the past.

While an argument can be made that there was general consensus regarding the appropriateness of Mount Vernon's first three reconstructions, the Blacksmiths' Shop, on the other hand, was not as simple a candidate for reconstruction. That Mount Vernon supported a blacksmith operation is not disputed, plantation ledgers survive providing extremely detailed records of the location and activities in the shop. Documentary records also identify the blacksmiths, both free and enslaved, who worked in the smithy. During much of the 20th century, the location of the shop in 1799 was in dispute. Additionally, like the Dung Repository, the inclusion of a dirty, smoky, industrial craft such as blacksmithing onto the picturesque, memorial landscape was controversial. Only in the 1990s, as historic sites in the
US embraced a more holistic social history in their interpretation were plans for the reconstruction finalized (Chappell 1992; Handler and Gable 1997). The confusion over its presence in 1799, lack of evidence for its appearance, coupled with the appropriateness of its interpretation, the proposed reconstruction of the Blacksmiths' Shop provoked debate among Mount Vernon staff for more than half a century. This touches on how much evidence is needed to warrant building a modern reconstructed building in the midst of authentic ones, the ethics of replacing a historic structure, albeit not of the chosen period, with a modern building, and decisions about what types of activities historic house museums should interpret.

The Blacksmiths' Shop was one of the sites depicted on the Vaughan Plan and a focus of Morley Williams's investigations during the 1930s. His archaeological excavation at the site discovered no structural foundation outlining the building, causing him to surmise that wooden posts, long since rotted, had supported the structure. He did discover a brick foundation that he identified as a forge. His site map shows postholes arranged in a pattern suggesting a fence line bounding a yard on the southern side of the hypothesized shop. It also clearly illustrates one dilemma of putting the Blacksmiths' Shop back -- there is an extant brick icehouse on the southwest corner of the shop.
Williams's accompanying report to Council addressed the icehouse. He initially assumed the icehouse was original to George Washington, but through his research

Figure 13. *View of Mount Vernon from the Northeast*, circa 1792 and attributed to Edward Savage, illustrates the Blacksmiths' Shop and Greenhouse / Slave Quarters. Courtesy MVLA.

Figure 14. Close up of the Blacksmiths' Shop. Courtesy MVLA.
found it first appeared on a mid-19th-century plan, and did not contain 18th-century brick. He concluded, "There is other evidence which proves very definitely that the icehouse could not have been there in Washington's time." He disregarded it with a final "so much for that ice house" (MVLA 1937: 41), but that icehouse caused controversy in the ensuing years.

In the post-World War II period, Mount Vernon's successful reconstruction of the Greenhouse / Slave Quarters generated momentum for an expanded restoration program supervised by Williams's successor, Walter Macomber. Macomber conducted excavations at the Blacksmiths' Shop site in 1955, uncovering the brick forge foundation, along with many ferrous artifacts. At this time Macomber claimed there was "insufficient evidence" to recommend reconstructing the shop (MVLA 1955: 91).

Nine years later, in 1964, the MVLA obtained a 1792 painting, "A View of Mount Vernon from the North East", attributed to Edward Savage, that shows a gray smudge behind a tree in the area adjacent to the north lane where the Blacksmiths' Shop was located (Figures 13 and 14). This smudge provided the evidence for a Blacksmiths' Shop sought by the proponents of the reconstruction. In her 1965 report, the Regent, Mrs. Beirne, called for more research on the Blacksmiths' Shop (MVLA 1965: 7). She, and presumably other Ladies, viewed the Blacksmiths' Shop as "the one missing edifice in this otherwise complete plantation." The Regent furthermore stated that MVLAs policy was "to construct only on physical
evidence" as at the Greenhouse where archaeological evidence had answered questions about the building's footprint (MVLA 1965: 7). The result of her suggestion was a motion by the Buildings Committee to undertake documentary research on the Blacksmiths' Shop (MVLA 1965: 32). This investigation continued for the next four years. The site was excavated again in 1968 and a thorough review of the documentary sources was conducted.

Figure 15. Walter Macomber's plan of the Blacksmiths' Shop. Courtesy MVLA
Documentary references record construction of the structure prior to 1765. A 1786 reference shows carpenters repairing the roof of the shop, which measured 16' long. The final mention of the structure was a 1798 farm report documenting a slave working in the smiths' shop. Blacksmithing tools are listed on Washington's probate inventory but a structure for blacksmithing is not specifically named (Wall 1969). The exclusion of the shop on the probate inventory, as well as the 1803 and 1805 insurance policies, called the existence of the shop in 1799 into question.

Because the final reference to the shop itself was the 1798 account, the icehouse, so easily dismissed by Morley Williams as not 18th-century / George Washington-related, suddenly became the focus of attention during the 1960's study. Benson Lossing visited in 1858 and published a drawing of the icehouse, writing that George Washington built it after his retirement from the presidency. He also mentioned that he observed someone working in "the shop near the conservatory" placing the mid-19th-century blacksmith elsewhere, probably farther down the north lane (Lossing 1991).

The staff and Ladies split into two groups over the future of the Blacksmith's Shop. The anti-reconstruction faction, led by Director Wall, seized upon Lossing's account. This group focused primarily on the lack of evidence for the physical appearance of the Blacksmith's Shop, using the debate about its location as the final punch to stop the reconstruction. As additional evidence against this location of the smithy in 1799, they pointed to the absence of the smiths' shop on Bushrod
Washington's two insurance policies and the probate inventory. These same policies had proved instrumental in providing the necessary evidence to support the Greenhouse / Slave Quarter reconstruction. The absence of the Blacksmiths' Shop, they felt, suggested George Washington abandoned the north lane smithy prior to his death. As early as March 10, 1966, Mr. Wall outlined his position in a memorandum to the Regent, stating "the evidence is inconclusive; the record is incomplete" (Wall 1966: 4). That Wall's remarks are prior to the documentary and physical investigations suggest that he was against a reconstruction on principle rather than based upon a lack of evidence.

The reconstructionists, led by the Regent and Mr. Macomber responded with their own list of positive points. Chief among these was the 1792 painting, which they felt provided ample evidence for the reconstruction. They interpreted the gray paint as a simple wooden shed building with a window. They countered that the inventory, insurance policies, and other documents had numerous known omissions, especially of utilitarian structures, which explained the missing Blacksmiths' Shop (Beirne 1966).

During the end of the 1960s, the two sides continued to revise their arguments. Mr. Wall penned a position paper questioning whether the exhibition area should continue to be interpreted to 1799. This work succinctly challenged the ethics of destroying a historic structure to build a modern facsimile, no matter how authentic. Wall viewed a reconstruction as "diminishing the integrity of a
remarkable group of buildings by intruding an imagined structure" (Wall 1969).

Apparently Wall had forgotten that he and Macomber had already done this when they destroyed a late 19th-century Greenhouse to reconstruct the Greenhouse / Slave Quarter, without any feelings of guilt or remorse and no attempt to record the demolished building.

Wall revealed his personal feelings and perhaps the real reason behind his reticence towards the reconstruction; at the close of the paper he categorized the Blacksmiths' Shop as "noisy, dirty, smoky" with "no proper place so near the master's residence, within the formal enclosed area." Wall's discussion focused on

Figure 16. Proposed Blacksmiths' Shop Reconstruction. Courtesy MVLA.
how Washington, during his final years, expanded and refined his plantation core.

Wall felt Washington would have moved his Blacksmiths' Shop farther from his mansion, and constructed an icehouse at the same spot, since it would be "unobjectionable aesthetically." He stated his position most strongly in the final paragraph, "a reconstruction, even though we might have data comparable with what we had for the Greenhouse, would have no place in the formal area unless and until it could be established that George Washington did not fulfill his expressed intention of establishing a new ice house and that the Blacksmiths' Shop still stood opposite the Spinning House on December 14, 1799" (Wall 1969).

During Council in 1969, the Building Committee heard from Mr. Wall and Mr. Macomber regarding the Blacksmiths' Shop. The Ladies' tabled the decision concerning the reconstruction (MVLA 1969: 45). The issue was repeatedly dismissed until Walter Macomber forced the Blacksmiths' Shop issue during the 1974 Council. At this meeting he provided the Buildings Committee with a plan for reconstructing a "proposed building simple, 12' x 16'...built of old material at a cost of approximately $2,500.00" (MVLA 1974: 46-47; Figure 15). The matter was again tabled and when the Building Committee met in 1975, the Minutes state they still hoped to see a reconstruction, although new evidence had not been discovered (MVLA 1975: 42). It was too late for Mr. Macomber, who resigned soon after the 1974 meeting, clearly tired of waiting for the elusive evidence, which would provide the necessary proof to rebuild.
In 1984, the Virginia Research Center for Archaeology (VRCA) conducted a survey and assessment of the estate. The Blacksmiths' Shop was one of the primary sites the Association wished the archaeologists to assess. These excavations, completed by Mount Vernon's own archaeological research department, generated results that were not very different from the interpretations of Morley Williams's 1930's investigation. The brick forge was uncovered for the fourth time, and numerous artifacts were discovered. Significantly, the most recent excavation identified the postholes for the two extant corners of the building, providing a dimension of 18'. Based upon this measurement and the location of the north lane it is now hypothesized the building measured 18' x 24' (Pogue 1988: 26).

The most recent archaeological excavations provided the evidence that allowed MVLA's Archaeology Committee to finally decide the fate of the Blacksmiths' Shop reconstruction. In 1990, they made three recommendations to the Board: the significance of the Blacksmiths' Shop as part of the plantation economy calls for interpretation; the reconstruction will not be undertaken immediately; but when the north lane area is changed the reconstruction should be considered (MVLA 1990). Soon after these recommendations were passed, an exhibit about the Blacksmiths' Shop opened on the estate accompanied by a drawing of the proposed reconstruction (Figure 16). A Master Plan accepted by the MVLA in 2000 calls for the reconstruction of the Blacksmiths' Shop, and signifies the acceptance of the
structure as an integral part of Washington's plantation (MVLA 2000).

Reconstruction is scheduled to begin in 2008.

As the interpretation at Mount Vernon expanded to include the larger plantation economy and landscape, an outgrowth of the social history incorporated into many historic sites during the last quarter of the 20th century, utilitarian structures such as the Blacksmiths' Shop and Dung Repository suddenly became more accepted. Approaching the bicentennial of George Washington's death in 1999, the Estate needed new buildings to populate the landscape and to provide new attractions for a new generation of visitors. The decision to reconstruct the Blacksmiths' Shop and the Dung Repository were both part of an enhanced emphasis on interpretation and transformation of the historic core from a shrine to Washington's memory into a more engaging and accurate landscape, which was linked to this 1799 anniversary. Historic sites often use anniversaries, which provide an opportunity for reflection, celebration and memorialization, as well as the potential for funding, as the catalyst to rethink interpretation, education and other motivators that result in reconstructions (Jameson 2004a).
George Washington's Gristmill and Distillery

The 1932 reconstruction of Washington's Gristmill and Miller's Cottage and the 2007 reconstruction of Washington's Distillery are discussed together in this section because their cultural biographies are so intertwined. This also elucidates why their histories are so unequal. While their physical reconstructions were separated by more than half a century, it was the attitudes, values and memory of these buildings, and towards the two processes of milling and distilling, that have drastically shaped the recreation of the site rather than the lapse in time. This provides an excellent example of how reconstructions reflect the social and cultural attitudes of their period of reconstruction and how historical memory affects the reconstructed past. This site also addresses how three-dimensional construction is more powerful than an outline and illustrates how decisions to reconstruct should coincide with an active interpretive theme.

Today, Washington's Gristmill is operated by the MVLA, but it was developed and managed as a Virginia state park from 1932 – 1997. The history of the site and initial reconstruction policy is therefore discussed separately from Mount Vernon. Located three miles from the historic core of Washington's plantation, the property is small, merely seven acres, although during the 18th century it was an integral part of Washington's 8,000 acre plantation. Approximately 30,000 people visit the site annually. Mount Vernon's goal is for 100,000 people to visit the site annually (MVLA 1995; Rees 2007).
In 1932, the Commission of Conservation and Economic Development, a branch of the state government, specifically chose Washington's Gristmill to be Virginia's historical site contribution to the bicentennial of Washington's birth. An undated newspaper clipping, probably from 1935, preserved in the scrapbook of William E. Carson, head of the Commission of Conservation and Development, remarked that in 1931, while planning for the bicentennial, the Commonwealth found the mill and Washington's birthplace the most neglected Washington sites in Virginia (Carson 1928-1941:2: 162).

The Commonwealth reconstructed the Gristmill and Miller's Cottage for the bicentennial; other features of the industrial complex, such as the Distillery, were proposed but not rebuilt (State Commission on Conservation and Development n.d.). With reconstruction complete, the park operated on a limited basis, opening sporadically for the next decade. In 1935 the state approached the MVLA hoping to sell the property. The MVLA refused and subsequently the Future Farmers of America leased the park, running it on a limited basis during the 1940s (Wall 1941).

The state resumed operation of the property during the next decade, continuing to open it periodically. Visitation never grew to the numbers anticipated during the 1930 development (Carson 1928-1941:3: 162). During its years as a state park, interpretation at the site was not well developed (George Washington's Gristmill Historic State Park n.d.). Focusing on a romantic image of a self-sufficient farmer
and the idyllic slower pace of early America, the mill's association with George Washington was almost an afterthought.

The Commonwealth approached MVLA numerous times between 1935 and 1994 to assume control of the property. In 1994, with the "George Washington: Pioneer Farmer" project ongoing, the Association finally decided the Gristmill complex fell within its larger interpretive mission and operations were transferred in 1998 (MVLA 1994). Today, the Mill is fully renovated and actively grinds corn and wheat daily, while the newly reconstructed Distillery showcases this industrial process. Interpretation revolves around these functions, providing an ending for the agricultural narrative begun at the Pioneer Farmer site. Not surprisingly, the MVLA refocused interpretation at the complex to be Washington-driven and centers on his entrepreneurial success rather than a more general story of the colonial miller. This transformation also focuses on the industrial and technological nature of the complex rather than a completely agrarian interpretation. This is designed to help streamline interpretation between the Mill and Distillery and better position the site within Mount Vernon's overall interpretation.

Reconstruction Policy

The Commonwealth of Virginia does not have a clearly defined reconstruction policy, and has few reconstructions on its historic sites. State parks, such as Washington's Gristmill, are administered by the Department of Conservation and
Recreation. Within this agency, natural and recreational areas are favored over historic sites; of the 34 Virginia state parks, only six properties have a historic focus (Virginia Department of Conservation and Recreation n.d.). Historic interpretation and research, as the cultural biography of Washington's Gristmill illustrates, are not priorities for this agency.

![Figure 17. Site of Washington's Gristmill (foreground) and Miller's Cottage (background) prior to reconstruction, 1932. Courtesy MVLA.](image)

**Critical History**

Washington first constructed a mill at this location, three miles from his mansion, in 1770. This replaced an earlier mill built during his father's tenure farther up Dogue Creek, a tributary of the Potomac River. By Washington's death in 1799 the complex included a large Distillery, Miller's Cottage, detached kitchen, cooperage, pens for livestock, possible slave quarters and additional support
structures. This was inherited by one of Washington's nephews whose heirs sold it to a group of Quakers in the 1840s. The Distillery burned in 1814; the Mill and other buildings were gone by the mid-19th century. While knowledge of Washington's Mill remained in locals' memories, the site itself became a privately owned agricultural complex (Figure 17) (White and Leeson 1999).

Local memory of the site never faded and the ruins of the Miller's Cottage were still visible when the Commonwealth purchased the property in 1932. The state's investigation of the property rediscovered the complex's rich history and plans for

![Figure 18. The reconstructed Gristmill. Courtesy MVLA.](image)

the site included not only reconstructions of the Mill and Miller's Cottage but also reconstructions of the Distillery, Malt House, Coopers' Shop, and a Cart Barn --
which were never executed (State Commission on Conservation and Development n.d.).

The Commonwealth's physical research in 1932 focused extensively on the Gristmill and only briefly on the Distillery (Figure 18). Excavations undertaken on the site of the Mill uncovered the stone foundations, stone portions of the race, and wheel pit. The reconstructed Mill was placed upon these foundations. A section of the wheel, with a 16' circumference, was discovered in the waterlogged soil. This evidence suggested the interior wheel was of the pitch-back type. A fireplace in the southwest corner of the building was also incorporated into the reconstruction (Burson 1932).

Unfortunately, the documentary sources were not as strictly adhered to as the physical evidence. Washington's diary categorically states the Gristmill was 2.5 stories. The reconstruction is 3.5 stories, creating a more imposing feature upon the landscape. The state relied upon a mid-19th-century sketch of the mill for window and door placements although these were also conjectured with the numbers of windows increasing, perhaps to create a more inviting and visitor-friendly structure (MVLA 1995).

An assessment of the 1930's reconstruction, written in 1995 as part of the MVLA's proposal to manage the property, suggests that the addition of an extra floor "produces only a minor change to the overall appearance of the structure" and
points to the "overall appearance of the structure" as being good, specifically
referencing the masonry, stone, window and door details and shingling, concluding
that the façade of the Gristmill is a "relatively accurate restoration" (MVLA 1995:
4). The positive tone of the assessment convinced the Association to undertake
restoration of the reconstruction and ultimately ownership of the property. By
minimizing the impact of the extra story, windows and other architectural features
the authors of the assessment suggest the reconstruction is credible and will make
a worthy addition to the Mount Vernon visitor experience.

The interior space, while roughly dictated by the stone walls uncovered during the
excavation and the milling process itself, was somewhat conjectured as well.
Finally, the hurst frame, the wooden support for the mill works, was incorporated
into the walls of the building, an error which would have eventually caused the
building to collapse had the Mill operated (Burson 1932; MVLA 1995; White and

The Miller's Cottage, a simple 1.5 story house during Washington's time, was a ruin, with the foundations exposed above the ground surface, at the time of the park development (Figure 19). The developers relied on these foundations, as well as the 19th-century drawing to reconstruct this domestic space (Burson 1932). It is not known when the original building disappeared, and the state conducted no excavations, apart from clearing the foundation. The reconstruction is a "generic Colonial-revival building" according to the MVLA assessment (MVLA 1995: 4).

During the 1960s, a modern kitchen was added to this building because it was utilized as housing for park workers (MVLA 1995). This addition increased the footprint of the building and it now imposes a more substantial presence like the Mill, although its historical function is rarely interpreted. Today it is used as a gift shop and ticket office. Neither signs or verbal interpretation regularly interprets this space's original function (White and Leeson 1999).

Adaptive reuse of archaeological in situ reconstructions, as discussed with the Greenhouse / Slave Quarters, accomplishes the first benefit of reconstruction, putting the structure back on the landscape for visual comprehension. It
completely fails to advance interpretation and serves to diminish the story of that building's occupants. In the case of the Gristmill, the process of milling and distilling is actively interpreted while the domestic life of the hired white miller, his family and their servants and enslaved workers is not interpreted. Visually, the presence of the Miller's Cottage acts as a space holder, rather than an interpretive venue. This is one of the most egregious uses of reconstructions, because the destruction of the archaeological site can be justified to advance interpretation, especially for people and groups with no visible remains or who have traditionally been neglected in written history; support and infrastructure, however, has no business being situated in buildings that could be interpreted. These functions should be housed in new buildings constructed away from the historic site and not on archaeological remains.

After excavation of the Mill was completed, the state began investigations at the site of the Distillery. No notes from this work are known, and the report on the site development does not include this work. The record of the Distillery excavation is a solitary photograph of the site after excavation, a brief article carried by the Associated Press, and a drawing of the footprint on a topographic map created in 1933. The newspaper article incorrectly implies that reconstruction of the Distillery was almost completed. The photograph documents that the soil was peeled back, revealing Distillery surfaces, foundations and features. The foundation on the topographic map measures 30 x 60 feet (Burson 1932; Carson 1928-1941:2: 142; White and Leeson 1999).
While the Distillery was uncovered and photographed, it is unlikely if the foundations of any other structures were discovered (Burson 1932). As the state contemplated plans to reconstruct the Distillery negative publicity, due to the fact that Prohibition was still part of the constitution combined with the economic downturn of the depression, halted development at the site (Carson 1928-1941: 2: 142; Public Opinion 1936).\(^5\) The foundations of the Distillery were outlined with brick probably during the early 1960s when an interpretive plan suggests the state had resumed management of the property and was increasing interpretation at the site (George Washington's Gristmill Historic State Park n.d.; White and Leeson 1999; Figure 20).

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\(^5\) The Eighteenth Amendment to the United States Constitution regulated prohibition of alcohol and was in effect from 1920 - 1933. This law prohibited the manufacturing, sale or transportation of alcohol.
With the transfer of management from the Commonwealth to the MVLA, archaeological excavations commenced at the Distillery in 1999 under my direction. The excavation was designed as a limited research project and to assess the potential for details to guide a reconstruction. At the end of the 2000 field season the rich archaeological remains suggested that reconstruction was possible and the Distilled Spirits Council of the US (DISCUS), the lobbying arm of the American distilling industry, was brought on to sponsor what then became a large-scale excavation focused on recovering physical evidence and total site mitigation. These excavations were completed in 2006, prior to the Distillery reconstruction.

DISCUS sponsorship ensured the project had the necessary funding to conduct the intensive and lengthy archaeological and historical research needed to study Washington's Distillery. The size of the site dictated that excavations would be conducted over several field seasons requiring significantly more professional archaeologists and affiliated specialists than our routine work plan. Additionally, because this was the first whiskey distillery studied archaeologically, there was more historical research needed. The DISCUS sponsorship was especially helpful in providing contacts within the distilling industry and the support for this research.

DISCUS officials were very patient and did not try to minimize or quicken the research phase but DISCUS sponsorship dictated that the final product of the excavation would be a reconstruction. Prior to their involvement we were
conducting excavations to assess the preservation of the site and see if a reconstruction was feasible based upon the physical evidence. After 2000, DISCUS's involvement meant that a reconstruction would happen. The return they sought was a space to publicize the historical beginnings of the distilling industry and an association with George Washington to legitimize their modern industry.

The archaeological excavation discovered that the foundations of the Distillery were not 30 x 60 feet, but rather 30 x 75 feet (Figure 21). This larger dimension is listed on an 1803 insurance document, which was probably seen by the 1930's developers. The earlier excavators encountered a sandstone partition wall at 60 feet, mistaking it for the exterior wall. It is now thought the partition wall was substantial to act as a fire block separating the stillroom from the storeroom and office (Pogue and White 2005).

Figure 21. A photograph of the Distillery excavation with interpretive text. Courtesy MVLA.
Distilling works under the principle that alcohol boils at a lower temperature than water. Ground grain or fruit was cooked and fermented; this alcoholic mash was placed inside a still. Washington's Distillery usually used rye, corn and malted barley for its mash, although wheat, peaches, apples and persimmons were also distilled (Pogue and White 2005). Copper stills were mortared into masonry furnaces and as the alcohol boiled off, the gas passed through a coiled copper tube or worm. This worm was inside a barrel and water continually flowed through the barrel cooling the worm and condensing the alcoholic gas back into a liquid. The whiskey was stored and sold to neighboring farmers and merchants in the nearby town (Pogue and White 2005).

Besides the insurance document, there are a plethora of documentary sources detailing the Distillery. Business ledgers, weekly work reports, and extensive correspondence serve to make this site one of the best documented at the plantation. The construction can be detailed on a weekly basis, and the level of detail is generally outstanding. Washington's Distillery housed five stills, a copper pot for boiling water and hired white distillers lived in the loft (Pogue and White 2005). Reconciling the archaeological evidence with this extensive documentary record was difficult at times and during the reconstruction process the documentary record was favored over the archaeological record, partly due to the ambiguity of the physical remains (Figure 22).
Four extensive brick features surrounded by scorched soil were uncovered. These are interpreted as furnaces (Figure 23). Three of these are inside the stillroom; one is just outside the structure to the west. Five narrow features with a U-shaped profile were interpreted as drains carrying water away from the worm tubs. The placement of four of these worm drains adjacent to two of these burned areas along the east wall suggests these were still furnaces each housing two stills. An ephemeral feature between these furnaces, with only slight burning and no masonry, combined with a good drain feature, was interpreted as the location of the fifth still. The fourth masonry furnace inside the still house along the west wall is reconstructed as the location of the boiler, while the exterior furnace is not incorporated in the reconstruction. The functions of the outside furnace and the western interior furnace are not clearly understood. During the reconstruction-
planning phase it was discussed that they represent multiple generations of boilers, although neither the physical nor documentary evidence supported this. The decision to leave the exterior furnace out of the reconstruction was motivated by a desire to restrict the interpretation of process to the still room.

Flooring inside the still house also posed a problem for the reconstruction. The documentary sources record both wooden and masonry floors. The excavation found areas with burned wood, suggesting wooden floors around the stills and drains. The northwest quadrant of the still room had a cobblestone and rubble surface, although this cobbled surface was much less systematic than the similar flooring treatment observed at the Dung Repository. This surface is interpreted as the mashing floor. Because neither sills nor joists, or other evidence suggesting a
wooden floor over this rubble, were seen during excavation, I think this surface somehow facilitated the mashing process. Period distilling manuals suggest mashing floors should be kept quiet and stable, which the cobbles and rubble would accommodate, however the surface is quite uneven and rather awkward to traverse. While the reconstruction of this floor incorporates a variety of materials, it is more uniform than the original and the matrix is mortared to facilitate visitors.

Written records indicate the Distillery contained a stair to access the rooms and grain stored in the building's loft. While the excavation did not find evidence for a stair, the documentary sources inform that an enslaved mason constructed the Distillery's stair. This reference suggests the stair was substantial with some type of masonry foundation. With no obvious place to position the stair, one was reconstructed in the southwest quadrant of the still room, the only portion of this space without an obvious function.

The 15-foot northern end of the Distillery was separated from the still room by a substantial sandstone partition wall, which deceived the 1930's excavators into thinking this was the end of the building. Postholes further divide this 15 x 30 foot space into two rooms. The post-in-ground partition is also substantial and the spacing suggests a 4-foot doorway. It is thought the sandstone partition provided fireproofing and security for the storage and office spaces interpreted as being on the ground floor. The substantial wooden partition also secured the storage area.
Archaeological evidence and documentary sources suggest that the hired white distillers lived above these spaces. It is not known where the six enslaved distillers were housed and separate quarters were not identified during the survey (White and Leeson 1999). The documentary records also indicate grain was stored above the still room, although it is possible the enslaved distillers slept here as well (White and Leeson 1999). The reconstruction provides access to the second story and the space above the still room is currently a museum of distilling history. The white distillers' chambers are interpreted above the store room. The story of the six enslaved distillers is further diminished, in favor of the white distillers' story, by not making some effort to show where the enslaved workers might have lived.

Allowing access to the second story dictated a number of alterations and additions for visitor safety. A 10-foot extension on the northern end of the building houses an elevator and metal stair. A door allows access to this modern extension from the office area, altering the appearance and feel of the storage/office bay. Finally, the historic stair conforms to code, facilitating changes that alter its appearance.

The exterior of this site suffers from being relatively small with modern suburban houses forming one boundary. Additionally, infrastructure for visitors is especially visible at the site. A large parking lot and modern restroom are close to the Distillery. Finally, to create a working mill and distillery the MVLA constructed a new concrete lined millrace and pumping system, both features which are visible on the landscape (Figure 24).
The treatment options employed at the Gristmill and Distillery during the 20th century, full reconstruction of the Mill and outlining the foundation of the Distillery, illustrate the different cultural attitudes towards these two trades. These options also illustrate how social, economic and political factors create the visible...
past. The Distillery reconstruction was not undertaken during initial development of the property in the 1930s because these factors halted the proposed reconstruction. Prohibition did not end in the US until 1933 at which time the Great Depression began. The association of George Washington and alcohol production elicited vehement opposition while his association with milling was viewed as compatible with his founding father image.

When the proposed Distillery reconstruction was floated in the news at least one vehement editorial was published refusing to believe that Washington had anything to do with liquor production. The anonymous author regarded those who wanted to reconstruct the Distillery as having "little regard for the future youth of this country" and "belittling the dignity of the first president" (Carson 1928-1941:2: 142; Public Opinion 1936). In response, Carson, head of the agency reconstructing the property, denied any intention to rebuild the Distillery, as well as all knowledge of the initial news article (Public Opinion 1936). By rebuilding the Mill and Miller's Cottage but not the Distillery, the Commission on Conservation and Economic Development succeeded in highlighting the culturally accepted interpretation of Washington the miller while diminishing the less accepted one of Washington the distiller.

More than half a century later, political and societal changes made the association of Washington and liquor acceptable. The reconstructed Distillery is now conceived as an important component of Mount Vernon's entrepreneurial and
farming themes. For this interpretation to occur the Distillery had to assume an equal presence with the Gristmill.

The historical dichotomy between interpretation of the Mill and Distillery illustrates how treatment choice is related to the dynamism of interpretation. In the case of mixed treatment options, as at this site, one story is thrust forward in an active and engaging manner, while another, often controversial, story is diminished. Reconstructed sites are more visible and therefore present a larger stage for interpretation, while more invisible treatment options lessen the platform for interpretation to occur. It is not yet clear if the newly reconstructed Distillery will provide the venue for active and engaging interpretation, as does the renovated Gristmill.

Clearly though, with very little interpreted domestic space, this site is poised to present the past with minimal focus on the people who created the entrepreneurial success. By diminishing the people from the story, and in this case the enslaved workers’ domestic life, Mount Vernon is able to promote the central figure of George Washington without exploring the African Americans who performed the labor at this industrial site. The domestic space that is reconstructed represents living space for the white distillery managers. This represents a serious omission at this industrial site and will hopefully be rectified in the coming years.
National Park Service Restoration Policy

The remaining three sites, Washington's Birthplace, Fort Necessity and Valley Forge are today part of the National Park Service, administered by the US Department of the Interior whose reconstruction policy was discussed in some detail in Chapter Two. While the NPS official policy does not support reconstructions, pragmatic practice tolerates reconstructions, especially ones done before park designation. In some cases individual park administrators still propose, fund, and build reconstructions, in contrast to official policy such as the ongoing reconstructions at Fort Vancouver, OR (Fort Vancouver n.d.).

The three NPS-managed Washington sites in this study are excellent examples of the juxtaposition between official policy and pragmatic practice concerning reconstructions in the US. The reconstructed birthplace of George Washington, currently known as the Memorial Mansion, was constructed by a private organization prior to the transfer of the property to the Park Service (Bruggeman 2006). Fort Necessity was also originally reconstructed by a private memorial foundation and deeded to the War Department (Harrington 2003). The NPS rebuilt this replica for the 200th anniversary of the battle, changing the design of the fort based upon archaeological evidence to better reflect Washington's structure. They have continued to maintain this fort; most recently constructing it of logs containing "permanent" plastic foundations to lessen maintenance (Fort Necessity 2003). Valley Forge, the most recently acquired NPS site in this study, has a long history of reconstructions, both "authentic" and representative. The site
underwent a 15-year "restoration" during the 1930s and 1940s that resulted in a number of representative cabins being placed on the landscape (Treese 1995). Today, the NPS continues to research the soldiers' huts used at the winter camp and plans call for maintaining a number of early examples and reconstructing additional models based upon current scholarship (National Park Service n.d.).

**George Washington's Birthplace**

George Washington's Birthplace National Monument, also known as Pope's Creek Plantation and Wakefield, is situated on the Potomac River in Virginia's Northern Neck, 80 miles from Mount Vernon (Figure 25). In 1931 the Wakefield National Memorial Association, a private foundation, presented the 550-acre site to the

![Figure 25. George Washington's Birthplace. Courtesy NPS.](image-url)
Augustine Washington, George Washington's father, purchased the Pope's Creek plantation in 1717/18 and constructed a house during the mid-1720s. This is the house where George Washington was born in 1732. He lived here until his family moved to Little Hunting Creek plantation in 1735. The property remained in the Washington family and was inherited by George's elder half brother Augustine upon their father's death. The house where Washington was born burned in 1779 and the ruins were neglected until Washington's step-grandson marked the site during a ceremony in 1815, one of the earliest commemorative events marking a Washington site (Hudson 1956). Unlike Mount Vernon, relatively few individuals visited the birthplace during the 19th century, probably due to its remote setting and lack of standing structures. Land surrounding the birth site began to be acquired during the last half of the century, and a granite monument was erected during the final decade of the century. Today, the National Memorial Site encompasses Augustine's Pope's Creek, as well as contiguous Washington family patents dating back to 1664 (Gilmore, Moyer and Alblinger 2001).

The Wakefield National Memorial Association was formed in 1923 with the goal of restoring the plantation for the bicentennial of Washington's birth in 1932. Over the next 9 years the Association began purchasing land and giving it to the federal government. In 1926, Congress authorized construction of a "house at Wakefield
as nearly as possible like the one built by Augustine Washington" (Bruggeman 2005; Hudson 1956). This "memorial mansion" was completed in 1931, the year the Association presented the property to the National Park Service (Hudson 1956). The memorial mansion remains the focal point of the site, surrounded by a recreated colonial farm, visitors' center, and site of the "actual" birthplace of Washington. The memorial mansion is the sole reconstruction present at Washington's Birthplace that fits the criteria for this study. (George Washington's Birthplace n.d.a, n.d.b; Gilmore, Moyer and Alblinger 2001)

Today, Washington's Birthplace functions as a colonial farm and has received attention for a successful rare breeds program. The NPS interprets Washington's birth and infancy through visitation to the memorial mansion and farm. Because the park encompasses the Washington family graveyard and archaeological sites of earlier Washington homesteads, they serve to show the foundations of the Washington family in America, focusing on their "legacy of public service, leadership, and love of land" which inspired Washington (George Washington Birthplace n.d.a).

Critical History

Washington's Birthplace is an example of how historical memory and modern assumptions can create reconstructions with limited concern for accuracy or authenticity. George Washington's birth home burned to the ground in 1779 and it was 35 years before Washington's step-grandson, George Washington Parke Custis
marked the site in 1815 (Beasley 2001: 199). By the time of Custis's pilgrimage to
the site, the area was an overgrown ruin, and Custis probably had no idea where
the birthplace stood. His small party placed the memorial near some bricks and a
chimney ruin, convinced that this was the correct spot (Beasley 2001: 199; Hatch
1979: 64). This act is significant because it became the "real" site of Washington's
birth by virtue of its marking the supposed site of Washington's birth. Confusion
over the location of the birth mounted throughout the 19th century as local farmers
moved the stone with little regard for its "importance" "marking" the birth location

The Washington family sold the 60-acre birthplace property to the Commonwealth
of Virginia in 1858. Because this tract was centered on the Custis marker (or the
then current location of the marker), Birthplace historian Seth Bruggeman (2006:
12) asserts that this act "legitimized the Custis site." In 1882 the state deeded it to
the Federal Government during the recovery from the Civil War (Beasley 2001:
202). In 1896, the government constructed a granite obelisk to mark the birth site,
located in the center of the Washington property as deeded to the government and
on the hypothesized site of the now vanished Custis marker. During foundation
excavations, a two-room brick building oriented east - west, 38 x 20 feet was
discovered. While these foundations were purported by the government to be the
remains of Washington's birthplace, the discovery was "disappointingly small and
ultimately led to all kinds of apologies and explanations" (Hatch 1979: 75). The
square footage of the building was thought too slight for the illustrative birthplace (Beasley 2001: 203).

In 1923 the Wakefield National Memorial Association (WNMA), a group of mainly, but not exclusively, women, was formed to "seek a more meaningful memorialization for the old Washington place where our first president was born" (Hatch 1979: 83). Led by Josephine Rust, the WNMA's objective was a "tidewater plantation" complete with restored birthplace finished by the bicentennial of Washington's birth (Hudson 1956; Hatch 1979: 83). Congress passed legislation in 1926 instructing the WNMA to construct a "replica" of Washington's birthplace (Bruggeman 2006: 18-19). That same year, while planning for the reconstruction, engineer J. Arthur Hook explored below the granite obelisk, due in part to local rumors that the "birth" house was larger than these foundations and this was not the site of the birthplace (Beasley 2001: 205; Hatch 1979: 84). These were again explored in 1930 when NPS engineer O. G. Taylor moved the obelisk. Taylor reported finding no additional foundations (Hatch 1979: 84). Based on the three investigations, it was generally concluded that this was not the site of Washington's birthplace. Opposition to the WNMA's plans was voiced by numerous individuals including Frederick Law Olmsted, Jr, who cautioned against construction on the foundations fearing the new construction would come to represent the actual birthplace (Beasley 2001: 205).
Despite these circumstances, plans for the reconstruction continued during the 1920s. With little documentary evidence and no physical evidence, the reconstruction was based upon a 1762 inventory, oral history from surviving Washington descendents of the house's appearance, and the general notion of how tidewater manor houses should appear. The first design, a 20 x 40 foot house, submitted by architect Edward Donn, Jr. was deemed too small for Washington's home, so a 58 x 30 foot house was designed and built, oriented north and south (Hatch 1979: 85; Figure 25). The redesign looked like both Gunston Hall, the

![Figure 26. Washington's reconstructed Birthplace. Courtesy NPS.](image)

home of George Mason in Fairfax County, Virginia, and Twiford, Mrs. Rust's childhood home. It was declared that both these houses were originally based upon the Washington home, further bolstering and legitimizing the new design (Beasley 2001: 208).
The federal government, while not in direct charge of the construction, did have to approve the design, which the Fine Arts Commission did in 1927, understanding that the new construction was not a strict reconstruction, because of the lack of evidence. The Commission also approved destruction of the foundations under the obelisk without further documentation. In 1929, Congress appropriated funds for the construction, and in 1930 transferred the property from the War Department (an agency reluctant about the plans) to the NPS, and authorized them to "cooperate with the Wakefield Association in the reconstruction work" (Hatch 1979: 86). Government officials, who were hesitant about the plans, due in large part to the discrepancies between the local memory, archaeological findings, and the documentary record, were encouraged to remain silent (Beasley 2001: 209 Bruggeman 2005).

In the autumn of 1930, as construction was set to begin, Donn instructed Taylor to excavate trenches in a mound 60 feet southwest of the obelisk site. There he discovered large foundations of a U-shaped building, 70 x 19 feet (Beasley 2001: 210; Hatch 1979: 88). Donn, realizing the significance of this discovery, drew plans of "Building X" and discussed the discovery with Charles Hoppin, the WNMA historian. Hoppin did not want to see construction delayed and could not "entertain a notion of any other site or house on any other part of the Wakefield estate, as the birthplace site and house, than the one where the monument was placed" (quoted in Hatch 1979: 88). Ultimately Donn resolved his doubt, interpreting the new large foundation as being constructed during separate
episodes and therefore could not represent the large house where Washington was born (Beasley 2001: 211).

By ignoring "Building X", the birthplace was completed on time, the Wakefield Foundation was not publicly embarrassed, and the property officially dedicated as a national park in May 1932 as planned for the bicentennial celebration (Pitcaithley 1989). The first superintendent, Phillip Hough, embarked on an archaeological program during 1936 that systematically excavated Building X revealing a substantial, burned foundation and more than 14,000 artifacts dating to the mid-18th century. Hough, however, did not believe the foundations could be the birthplace "as it did not face the view afforded" (Hough quoted in Beasley 2001: 212-213; Bruggeman 2005). This foundation was also centrally placed, and in line with other known remains, while the memorial mansion site was not (Beasley 2001 213). Although Hough disregarded the archaeological work in favor of the reconstruction site, the findings did concern the Secretary of the Interior Harold Ickes. He asked architectural historian Fiske Kimball to comment on the finds and Kimball's unequivocal support of Building X was the basis of the "official opinion that the 'Mansion' house by findings and design could be neither a replica nor a reconstruction of the Washington Home" (Hatch 1979: 93). In Kimball's support of Building X as the "birthplace" he remarked that it was "too bad these foundations were not known (appreciated, that is) in 1930" (quoted in Hatch 1979: 93).
The 1930's excavation of Building X and Kimball's study, succeeded in altering interpretation of the site. The name 'memorial mansion' was officially used to refer to the new construction and a NPS handbook admitted that the building "could not be a replica" but was "in keeping with the Virginia plantation scene at the time of Washington's association with the place" (Hudson 1956: 29). This same guide, however, dismissed it by remarking that the "possibility that it (Building X), rather than the smaller foundation on the memorial mansion site...was the exact spot where George Washington was born cannot be ignored and will perhaps always remain an intriguing question" despite the fact that these foundations were the "most extensive ones unearthed at Wakefield" (Hudson 1956: 37).
It would take the upcoming bicentennial of the US, another patriotic period, for the NPS to reexamine the controversy at Washington's Birthplace. Celebrations for this anniversary were held in 1976, but planning and study occurred for a decade prior to the event. This bicentennial, like many anniversaries, served as a catalyst for reconstructions and a refocused interpretation of sites that could address the event (Hosmer 1981; Kammen 1991). At the Birthplace, Bruce Powell studied the past archaeological work, concluding that the foundations of Building X should be exposed and interpreted as the site of Washington's birth.

Powell felt the foundation below the reconstructed Mansion was probably an outbuilding. Unfortunately, a new evaluation of those foundations was not possible; they were completely destroyed during the 1930's construction (Beasley 2001: 209). Beasley (2001: 214-215) remarks that this was the first time the NPS took the suggestion of interpreting Building X seriously. Today, while the Memorial Mansion still stands and is interpreted as a 1930's idealized 18th-century dwelling, Building X is outlined and acknowledged as the actual site of Washington's birth (Figure 27). The continued existence of the Memorial Mansion, the label of the authentic birthplace as site X rather than a more descriptive name, and the outline of the birthplace site, combines to create what Beasley (2001: 216) identifies as the present shaping views of the past. The authentic birthplace's presence on the landscape is minimized while the created birthplace remains the focal point of the visitor experience. The juxtaposition of a three-dimensional structure as the central visitor experience with the two-
dimensional authentic site is evidence of the impact and power of built reconstructions
**Fort Necessity**

The location of the start of the French and Indian War, Fort Necessity National Battlefield Site, is part of the National Park Service. While the park comprises 900 acres across three venues, the site of the fort is considerably smaller, merely two acres. This site draws approximately 100,000 visitors a year. A recently completed visitors' center has greatly increased the gallery space at the site (Fort Necessity n.d.; Tilberg 1954; Figure 28).

![Map of Fort Necessity](https://via.placeholder.com/150)

The fort was hastily constructed by colonial Virginia troops under the command of 22-year-old Colonel Washington in 1754, at Great Meadow, south of Pittsburgh.

Figure 28. Fort Necessity. Courtesy NPS.
Washington and the troops were on a road building mission and had chosen the natural meadow as an encampment, building a storehouse in late May. A few days after arriving, Washington heard French forces were camped nearby and his forces surrounded the French camp. The ensuing skirmish left the small French force decimated, and their leader dead. Washington, fearing French reprisals, returned to Great Meadow, fortifying the storehouse during early June and naming the fort Necessity (Fort Necessity n.d.; Harrington 2003).

Reinforcements, including some British regulars, arrived in June, giving Washington about 400 men under his command (Fort Necessity n.d.). The anticipated battle occurred July 3, as 700 French and Indians attacked and overwhelmed the fort by the end of the day. Washington signed surrender documents, including a clause admitting to assassinating the French commander at the May skirmish. Washington later denied having seen this phrase on his translation of the documents, but the document became fierce propaganda for the French, fueling the ensuing war (Fort Necessity n.d.; Harrington 2003: 5-7). Upon the departure of the colonial and British troops, the French burned the fort (Harrington 2003: 7).

Fort Necessity is significant in Washington's life as the site of his first military battle and the site of his only surrender. Washington purchased the land in 1771 and held it until his death. It remained undeveloped and in private hands until the
title was transferred to the War Department in 1931 and subsequently to the Park Service in 1932 (Harrington 2003). 6

As early as 1816, when a map of the meadow was drawn, visitors to the area were interested in the fort, and the ensuing controversy about its shape is detailed below. A cornerstone for an unrealized memorial was laid in 1854, and physical investigations occurred in 1901 and 1931 in preparation for a reconstruction to commemorate the 1932 bicentennial. Further archaeological investigations occurred in 1952 when a subsequent reconstruction was built (Harrington 2003).

The NPS interprets the fort site as the start of the French and Indian War, and signifies this site as the beginnings of British dominance in North America and as the precursor to the American Revolution. The fort site is part of a much larger NPS unit that interprets the National Road and the history of early westward expansion. Great Meadows marked Washington's emergence onto the national stage and is therefore his first foray into a public sphere. It is an important site for interpreting Washington's legacy despite the fact it was not the location of a military success, because this provided him with the experience to take control of the Continental Army at the start of the American Revolution (Fort Necessity n.d.).

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6 Washington's ownership is not significant; during this period Washington was actively purchasing western lands as investments, especially those he had seen as a young surveyor. At his death he owned more than 52,000 acres (Abbot 1999: 477 - 492).
Critical History

Before becoming part of the NPS, Fort Necessity was one of the sites under jurisdiction of the War Department, being purchased from private owners by the Fort Necessity Memorial Committee and deeded to the War Department in 1932 for the bicentennial of Washington's birth. At that time, a large reconstruction of the fort was recently completed (Figures 29 and 30). Prior to the reconstruction,

the site consisted of an undeveloped meadow, with faint traces of earthworks. Debate during the 19th century centered on the shape of the earthworks as either triangular or diamond in design. In his review of the history of the site, Harrington (2003) discusses how early surveyors, interested in the physical remains of the fort, visited, mapped and published different surveys of the overgrown earthwork. In 1816 the fort was interpreted as triangular while the 1830 survey showed a diamond shape. Both surveyors interpreted the earthworks as the remains of earth piled upon the stockade, and therefore representing the shape of the fort.
Field inspections in 1901, 1903, and 1931 promoted the diamond or rectangular version of the fort, dismissing the triangular plan as not fitting the topography (Harrington 2003: 12). The 1901 work discovered a section of oak timber,

Figure 30. The 1932 reconstruction of Fort Necessity was a large, rectangular fort. Courtesy NPS.

Figure 31. The 1954 reconstruction of Fort Necessity was a smaller, round fort. Courtesy NPS.

strengthening the idea that the stockade was constructed on the rectangular line of the earthworks (Tilberg 1954). Excavations undertaken in 1931 followed this thinking, concentrating on the ridge and conjectured the stockade being where
ridges were no longer visible. Because of the preconceived notion of where the stockade should be, the excavators ignored posts encountered away from the rectangular ridge and did not recognize them "as being significant since they were not found along the traditional or assumed line of the stockade" (Harrington 2003: 23).

The 1930's developers also discounted a 1759 observation that the site appeared round (Harrington 2003: 12) and based upon their limited testing they reconstructed a large, rectangular palisade based more upon preconceived notions of how the fort should look than on physical or documentary evidence. In 1952, J. C. Harrington, a NPS archaeologist, began testing around the reconstruction to locate exterior entrenchments for reconstruction to augment the rectangular fort. Harrington also hoped the fieldwork would settle the triangular vs. rectangular controversy about the fort's appearance. (Harrington 2003: 25).

The excavations did not encounter any entrenchments outside the reconstructed stockade. This lack of evidence caused them to review the documentary evidence and at the start of the field season in 1953 they worked under a new model – that the ridges historically visible were not the result of dirt piled upon the stockade, but rather the remains of the entrenchments and the stockade was, as two 18th-century accounts suggested, small and round. They quickly discovered remains of the stockade posts, still set vertically into their trench (Harrington 2003: 32-34).
Approximately $\frac{1}{4}$ of the circular stockade was destroyed by the earlier reconstruction, and because the posts were not where they had anticipated finding them the 1930's workers had not noticed them nor recognized their meaning. Harrington's interpretation of the remains suggested that the French displaced many of the posts during their destruction of the fort after the battle (Harrington 2003: 39). Harrington also explored the entrenchment, the rectangular ridge mistaken for more than 100 years as the stockade outline. Based upon archaeological testing of this feature, he was able to extrapolate the shape of the entrenchment, as well as the depth of the associated ditch (Harrington 2003: 44).

With the archaeological evidence, the NPS embarked upon a new reconstruction to more accurately depict Washington's fort. The new reconstruction opened to the public in 1954 (Figures 31 and 32). Harrington found no evidence of the
storehouse that period accounts state was in the middle of the stockade. Due to the lack of physical evidence, the storehouse is a representative structure, based on the appearance of a typical log building (Harrington 2003: 43). Preservation is an issue at Fort Necessity, partly because of the wet environment, despite repeated episodes of filling and raising the fort site. The NPS has replaced the Fort approximately every 10 years since the 1954 reconstruction. In 1998 the NPS dismantled the fort and rebuilt it with plastic bases jointed to wooden posts. They hope this hybrid of man-made materials underground combined with an accurate wooden stockade will help the long-term life of the feature (Fort Necessity 2003).

Fort Necessity, like Washington's Birthplace and Washington's Gristmill and Distillery, is a site where the built environment is completely reconstructed. Unlike Mount Vernon and Valley Forge, the next case study, these completely reconstructed sites do not contain extant features as the foundation of the interpreted landscape. Additionally, Fort Necessity is unique in this study because the reconstructed fort has evolved through time as more sophisticated archaeological techniques developed, which provided new evidence about the appearance of the fort. This reconstructed fort's appearance has radically changed between the initial rectangular fort and the later circular one. Because of the expense and destruction of reconstructions on archaeological remains most three-dimensional reconstructions do not change greatly once they are placed upon the landscape.
Valley Forge

Valley Forge, another National Park Service site, was the location of the Continental Army's winter encampment in 1777 / 1778. Today, it is the largest property in this study comprising 3600 acres and welcoming more than 1.2 million people in 2005 (Valley Forge n.d.; Figure 33). This popularity is in part due to the park's location in a suburb of Philadelphia. It is probably the most famous Revolutionary War site and symbolizes the perseverance of America's revolutionary spirit. George Washington, commander during the brutal winter encampment, is linked with Valley Forge as the man who forged a successful army from a ragtag, undisciplined group of soldiers.

As with Mount Vernon, Valley Forge's most significant structure, Washington's Headquarters, survived and remains a central focus of the park. While Valley Forge was not as heavily visited as Mount Vernon in the first half of the 19th century, tourists did venture there. To honor the centennial of the encampment, the Valley Forge Centennial Association was formed in 1877 and the following year the reorganized group set the purchase of Washington's Headquarters as their goal. The new group, the Valley Forge Centennial and Memorial Association elected MVLA veteran Anna Morris Holstein as regent, evidence that the influence of the MVLA extended into other preservation organizations during this period (Kammen 1991; Treese 1995).
Figure 33. Valley Forge. Courtesy NPS.
Mrs. Holstein's group successfully acquired Washington's Headquarters but as they struggled to raise funds, suggestions were floated in the press for the area to become either a national, state or local park and by the end of the century some of the winter camp was Pennsylvania's first state park. The site remained in state hands until the 1976 bicentennial when the state park was named a National Historical Park with administration transferred to the NPS (Unrau 1984).

Today, Washington's Headquarters remains a popular destination providing green space in a suburb of urban Philadelphia. Miles of roads and trails allow access within the large park. Reconstructions of both landscape features and cabins for the soldiers have a long history at Valley Forge. The National Society, Daughters of the Revolution of 1776 constructed the first cabin in 1905 (Treese 1995; Unrau 1984: 109). By 1910 a hospital and several additional huts were reconstructed, although most huts were not reconstructions nor on original foundations, they simply served as various park structures (Unrau: 1984: 117-120). In 1935, influenced by Colonial Williamsburg, the park leadership announced a "complete restoration of Valley Forge" would be undertaken during dedication of a newly reconstructed hut (Treese 1995; Unrau 1984). The "complete" restoration did not materialize but multiple generations of huts and other structures today dot the Park landscape and the struggle over what type of commemoration would occur at Valley Forge is significant because it illustrates the evolution from a memorialized landscape to a reconstructed one, something many early historic sites faced as they matured.
Archaeological investigations of cabin remains have continued through the years at Valley Forge, most recently in 2000-2001, under the direction of David Orr, formerly Chief of the Valley Forge Center for Cultural Resources, but these investigations have not resulted in additional reconstructions (Campana and Crabtree 2002; National Park Service n.d; Orr and Geier 2006).

Critical History

While many features are reconstructed at Valley Forge, this study deals primarily with the soldier's hut, a building type that was first reconstructed in 1905 and continues to be the subject of study and debate to this day. During the history of the park, numerous generations of these huts were interpreted, based primarily on George Washington's written order issued December 18, 1777 which specified that:

> The Soldier's huts are to be of the following dimensions, viz: fourteen by sixteen each, sides, ends and roofs made with logs, and the roof made tight with split slabs, or in some other way; the sides made tight with clay, fire-place made of wood and secured with clay on the inside eighteen inches thick, this fire-place to be in the rear of the hut; the door to be in the end next the street; the doors to be made of split oak-slabs, unless boards can be procured. Side-walls to be six and a half feet high. The officers huts to form a line in the rear of the troops, one hut to be allowed to each General Officer, one to the Staff of each regiment, one to the commissioned officers of two companies, and one to every twelve non-commissioned officers and soldiers (Fitzpatrick 1933: 171).

With such specific instructions, generations of architects, patriotic organizations, and park officials relied upon this data, reconstructing what they felt were accurate huts upon the landscape. Formal archaeological investigations of hut sites did not
begin at Valley Forge until 1962, almost 60 years after the first reconstruction
(Unrau 1984: 341). The long period of development at Valley Forge, combined
with the repeated reconstructions of one building type -- the soldier's hut -- make
this park an excellent example of how evidence is interpreted and reinterpreted,

![Figure 34. The 1905 reconstructed cabin. Courtesy NPS.](image)

and how archaeological research, because it represents what was implemented
rather than planned, can alter notions of what is accurate.

The first building reconstructed at Valley Forge was a log hut, built by the
Daughters of the Revolution, Colonial Chapter of Philadelphia, in 1905 (Figure
34). The construction was based on Washington's 1777 orders for 12-man huts.
The builders publicized it as being placed upon the site of an "original hut" "as
proven by the buttons found in the hut hole" (quoted in Unrau 1984: 109). The reconstruction provided "stimulated visitation to the park" by providing tourists something tangible to view (Unrau 1984: 109). This building still survives and there are records of it being restored in 1945 and 1968 (Treese 1995: 131, 139).

The next few years additional reconstructions, although there are few records of these buildings. Three additional huts based on Washington's orders were constructed between 1907 and 1908 to "improve the 'historic' values of the park" (Unrau 1984: 116). In 1908 – 1909 at least five additional huts were reconstructed, these mainly served as shelter for guards working at the park (Treese 1995: 139; Unrau 1984: 120-121). A hospital hut was even reconstructed.
in 1909 or 1910 and all these reconstructions were reportedly based upon Washington's written order (Treese 1995: 139; Unrau 1984: 123).

The construction of a hut by the Pennsylvania Society of the Sons of the Revolution in 1935 ushered in a renewed emphasis on restoration at the park (Figure 35). This hut was based upon extensive research by architect D. Knickerbocker Boyd, and placed over the depression of a hut with the original dirt floor visible (Treese 1995: 129). The fireplace was centered at one end of the hut, partially based upon charcoal seen during the clearing of the site. The hut was thought extremely accurate and the park commission felt its significance was its "historical authenticity," minus a few details (Unrau 1984: 247). The Sons hoped construction would inspire other organizations to construct additional examples, and optimistically named their hut "#1" (Treese 1995: 130).

The following year, based on the momentum generated by the reconstruction, a broad policy shift altered Valley Forge. The park commission, the governing agency of the state park, resolved that no additional monuments would be constructed and instead reinterpreted the 1893 legislation that created the park. This legislation stated that generations should "maintain Valley Forge as nearly as possible in its original condition as a military camp" and Pennsylvania Governor George Earle endorsed this through his plan for "complete restoration" of the park to "Washington's time," evoking the success of Colonial Williamsburg as a model (Treese 1995: 132-133; Unrau 1984: 260-261).
The Governor envisioned a Valley Forge with "miles of entrenchments and the building of hundreds of soldiers' huts" primarily through labor to be supplied by the Civilian Conservation Corps (CCC), part of President Roosevelt's New Deal (Treese 1995: 133). The complete restoration was immediately criticized. Opponents of the Governor's plan called it an "abomination" and paralleled large-scale restoration to "an exposition." These critics pointed out the insufficient data to conduct the reconstruction program, that en-masse reconstructions would be "ugly" and "desecrate" the countryside (Treese 1995: 133-134; Unrau 1984: 261-263). The NPS controlled CCC work at national and state parks and although the CCC at the time was not opening new camps, the NPS did provide guidance and consultation to Valley Forge administrators and the Governor (Unrau 1984: 263-264).

The NPS cautioned Valley Forge that sample restoration was preferred over complete restoration due to the costs and upkeep involved. The NPS also suggested incorporating archaeological research to provide physical evidence. In 1937, the NPS adopted their restoration policies calling for sample rather than full reconstruction. These policies had "a significant impact on the Park Service's negative attitude toward Governor's Earle restoration plan" and ended all hopes of CCC involvement at Valley Forge (Hosmer 1981: 1009; Treese 1995: 134-135; Unrau 1984: 265-266).
The lack of CCC involvement did not dampen enthusiasm for the restoration plan among park officials, although World War II reduced this priority. The economic success of Colonial Williamsburg, which welcomed slightly more than 4,000 visitors in 1932 to almost 211,000 at the beginning of World War II, was looked to as a model of how the development could provide jobs and a more interesting venue to attract travelers (Kammen 1991: 367). Supporters of the plan felt restoration was a component of the initial 1893 legislation. These supporters, led by Gilbert Jones, the secretary of the Park Commission, played upon fears that without restoration to fulfill the legislation, the federal government would take over the park (Unrau 1984: 290). On July 3, 1945 Governor Martin approved the restoration, placed architect Edwin Brumbaugh in charge, and appropriated funds
for a series of projects including building eight company streets with 10 huts each at seven sites (Unrau 1984: 291).

Brumbaugh used Washington's order as primary evidence for the huts (Figures 36, 37 and 38). He also relied upon an 1863 poem presumably written by the Valley Forge surgeon. The romantic, Victorian-era poem included a description of a hospital hut with "many comfortable features never specified in Washington's orders, including an oak floor, three windows, and a separate kitchen (Treese 1995: 138). Brumbaugh also studied the earlier reconstructions, although these differed greatly in appearance and therefore were not a good model (Treese 1995: 139).

The number of huts was scaled back to 30 and initial construction occurred in a workshop where design and fabrication was perfected before transportation to the site. Construction details included local wood, wooden hardware, irregular stone
chimneys, and wrought nails. Rather than being placed on the site of original huts, impossible to determine without archaeology, some of the huts were scattered throughout the park near earlier reconstructed huts and these mainly served to commemorate important locations such as specific state brigades. Other huts were positioned in a regular pattern, implying "that eighteenth-century soldiers had neatly aligned their huts in orderly company streets" (Treese 1995: 139-140; see also Unrau 1984: 303).

Because Brumbaugh's methods were too time consuming, a contract for 20 huts was let to another builder, abandoning Brumbaugh's meticulous methodology, and by 1951 there were huts distributed throughout the park (Treese 1995: 141). Besides providing something for visitors to see and experience, the huts were also symbolic of Valley Forge's most significant theme -- the common soldier. The barefoot soldiers being transformed into an army by Washington during the winter of the encampment embraces Valley Forge's legacy. The huts allowed visitors to visualize where the soldiers lived and erecting multiple huts along streets provided visitors with a larger image than the earlier lone hut reconstructions.

Almost immediately the reconstructed huts began to deteriorate and Brumbaugh implemented measures to conserve the structures (Unrau 1984: 314, 322). During the 1960s many of Brumbaugh's huts were themselves reconstructed, and in the process many construction details were lost, compromising the accuracy of the huts even further. The "huts became almost indistinguishable from the remaining
park police huts" causing Brumbaugh to lament their "complete loss of authenticity" (Treese 1995: 151).

The Pennsylvania Historical and Museum Commission conducted the first formal archaeological excavations at Valley Forge during the early 1960s (Unrau 1984: 341). In the years leading up to the national bicentennial archaeology continued, as did another wave of hut reconstructions (Treese 1995: 151). Excavations revealed that the huts were by no means regular, systematic, or conformed to Washington's orders. The archaeological evidence pointed to crude construction, such as quickly laid foundations, variability in chimney placement away from the rear center that his order specified, and variations from the regularly sized and shaped logs called for in Washington's order. Rather than neatly facing company streets, the archaeological huts are scattered throughout the camp with no regard for streets. Many huts were smaller than the published documentation (Unrau 1984: 486). "The collective evidence led to the conclusion that the urgency with which shelters must have been constructed during the winter of 1777-1778 would have prevented the army from building huts as uniform and neatly lined up as Brumbaugh's" (Treese 1995: 151). The bicentennial research episode reflected the unpredictability evident in the archaeological record, and exhibited the array of design and technique used in eastern log construction during the 18th century, Brumbaugh felt the redesign "went much too far" (Treese 1995: 151).
Recent excavations conducted in 2000 - 2001 under the direction of David Orr supported the earlier archaeological discovery that "individuals or teams of individuals down to the level of the common soldier had some leeway with respect to the dwellings they occupied and constructed" (Geier, Orr and Reeves 2006: 15). Orr's work has further strengthened the understanding that the cabins constructed at Valley Forge exhibited great variation based upon "resources, construction skills, creativity, and desire for personal comfort of the occupants (Geier, Orr and Reeves 2006: 15). This work has not resulted in new reconstructions or any attempt to alter existing reconstructions.

Figure 38. One of the 1940-era reconstructed cabins, Muhlenberg Encampment. Photograph by the author, March 2004.

The "complete restoration" was a flurry of brief projects, which overall had little lasting or significant impact on the park (Treese 1995: 154). Valley Forge
historian Lorett Treese (1995: 154) points to the huts as "the most successful part of the complete restoration." While they still require maintenance, they "form a stage setting" for events and provide a visual base to see, Williamsburg-style, where soldiers lived. While the first three generations of huts (1900s, 1935, and 1940s) were based primarily on Washington's order, there is a great discrepancy between the appearances of these reconstructions. The 1905 hut has a cabin-like appearance with a tall A-frame, peaked roof. The 1935 hut is low, almost a dugout, with a massive log chimney. Brumbaugh's 1940's huts are between the earlier two in height, and their regularity is today criticized as reflective of post World War II American suburbia, with the uniform huts aligned along standardized streets (Geier, Orr and Reeves 2006; National Park Service n.d.; Treese 1995). Valley Forge historian Lorett Treese (1995: 141) suggests Brumbaugh recreated the post-war American dream of suburbia within the guise of a Revolutionary War camp.

Today, the huts are still visible on the landscape although interpretation of the buildings is minimal. During several visits to the park in 2003 and 2004 I found the huts unoccupied and deserted without any interpretation or effort to utilize them within the overall interpretation of the park. I believe the lack of interpretation at the huts during these site visits suggests they present only a visual rather than engaging or active presence upon the landscape. Because they are not interpreted in any manner it is difficult to gain a sense of what they represent.
Conclusion

These case studies are drawn from heritage sites that are open to the public because of their association with George Washington and it is suggested that they represent a cross-section of reconstructions to view larger issues within the nature and construction of these entities at historic sites. Due to the impermanence of much of America's built environment, the sites included in this study have reconstructed buildings to provide something tangible to view as well as to further interpretation. America's historic preservation movement is rooted in the cult that grew up around Washington in the 19th century and his influence remains important in ongoing reconstruction projects at Mount Vernon and Ferry Farm, his boyhood home near Fredericksburg, VA, both sites that interpret his life (Hosmer 1981, 1965; Kammen 1991; Marling 1988; Muraca 2007; MVLA 2000).

Through the detailed discussion of these five Washington sites and their associated reconstructions a number of parallels are visible. During the initial wave of Washington reconstructions, prior to World War II, the lack of scientific archaeological excavations is evident, as is the reliance upon memory as a source of evidence. Scientifically based archaeological excavations were only beginning during this period, as illustrated by these examples. While the reconstructions of Washington's Gristmill, Miller's Cottage and Mount Vernon's Coach House were placed upon the foundations uncovered by laborers, it was the rebuilding of Fort Necessity in the 1950s when archaeology first truly informed a Washington reconstruction.
In cases such as the Valley Forge cabins, the original Fort Necessity or Washington's Birthplace, the decision to reconstruct was made before a thorough review of the evidence was undertaken. Reconstructions built in haste before critically reviewing or gathering evidence often results in an invalid or highly conjectured structure. At Mount Vernon, because of the institution's conservative approach, the reconstruction of the Greenhouse / Slave Quarter was not attempted until after extensive documentary evidence was discovered. This project would have undoubtedly benefited from archaeological study as well.

Finally, the reconstructions of these five locations important in the life of George Washington are part of a larger phenomenon in US historic sites and their cultural biographies serve as illustrative examples for this tourism trend. Because so many of the historical buildings in the US disappeared due to their impermanent construction, many historic sites utilize reconstructions to provide something tangible to view and to facilitate interpretation. Begun during the early 20th century, the desire to reconstruct and the implications of these reconstructions is discussed in the following chapter with the focus on analyzing these reconstructions within several contexts to discover if there is a means by which criteria can be identified to measure the success, effectiveness and shortcomings of specific reconstructions.
Chapter Five: Using the Washington Case Studies to Explore Criteria for Assessing In Situ Reconstructions

Introduction

This chapter analyzes the Washington reconstructions introduced in Chapter Four within a framework of the international charters, the Secretary of the Interior's Standards for Reconstruction, Criteria Consideration E and the seven aspects of integrity as developed for the National Register of Historic Places by the National Park Service (NPS). Chapters Two and Three introduced these four entities discussing how they serve to provide policy about reconstructions on both international and domestic stages. Chapter Three also addressed why American historic sites frequently incorporate in situ reconstruction as an interpretive method. This study focuses on in situ reconstructions because this type is used frequently in the US.

This discussion seeks to analyze the effectiveness and ethical merit of in situ reconstructions from a professional and administrative standpoint. It does not seek to analyze reconstructions from a visitor perspective or provide insight into how visitors to historic sites think about or understand reconstructions. Stone and Planel (1999a, 1999b) suggest that the fact reconstructions are built indicates that administrators perceive that the public appreciates them and their presence enhances visitation. Clearly the visitor plays an important role in the justification for, and the utilization of, reconstructions, but this is not within the scope of this particular analysis.
Within the scope of this thesis, effectiveness is viewed in terms of professional and intellectual planning and construction, and how "successful" a fully utilized reconstruction is in advancing interpretation. The ethical merit of the reconstructions is also analyzed from both a scholarly aspect as well as an educational and interpretive standpoint. This discussion is subjective of course, but I hope that broad standards will emerge with which to begin to assess reconstructions. Defining criteria that can be used to effectively measure and weigh existing and planned reconstructions, is the goal of this chapter.

Assigning a level of success for a reconstruction is a biased exercise. Looking at reconstructions built during a period of more than a century heightens the subjectivity of this discussion. The long and continued popularity of historic sites associated with George Washington presents a unique opportunity to view a series of reconstructions through time and space, but this also makes direct comparisons difficult. Therefore, this discussion does not attempt to compare effectiveness through time, but rather to evaluate the reconstructions within their respective construction periods as well as in the present through a lens where benefits and effectiveness are measured in terms of educational impact and sound construction principles. It is hoped that by evaluating reconstructions from a professional/technical view and an educational/interpretive view, broad thoughts will illustrate when reconstructions serve to positively enhance a historic site. At the conclusion of this exercise I anticipate that ideas will emerge to provide guidance for historic
sites in the planning and execution of reconstructions, especially to gauge when a reconstruction is not the best choice for interpretation and in the utilization of already existing structures.

The review of international charters identified five universal principles guiding reconstructions: extensive evidence to negate conjecture within the reconstruction; the building be identified as a reconstruction; new construction should be easily revised as interpretation and scholarship evolves; the construction should avoid disturbance to archaeological remains; and reconstructions should not occur in situ. While historic preservation professionals in the US do not always follow every clause in these charters, they are utilized as a series of "best practices" which can be used in both planning and evaluating the interpretation of archaeological sites. Because reconstructions are often favored for their perceived economic and interpretive benefits, these policies represent a theoretical beginning rather than codes to adhere to.

Nationally, the Secretary of the Interior's Standards for the Treatment of Historic Properties help guide reconstruction work (Department of the Interior 1995). These six standards permit reconstructions as a treatment option for historic structures when: there is enough evidence to permit an accurate reconstruction with little conjecture and it is "essential to the public understanding of the property;" an archaeological investigation precedes in situ reconstruction to gather evidence and mitigation of surviving features is undertaken; preservation of
historic fabric and relationships is undertaken; the new construction is based on evidence for all elements rather than conjecture or a representation; reconstructions are identified as such; and reconstructions do not execute designs that were never constructed.

In this country, many reconstructions meld seamlessly into the fabric of their greater historic site and after 50 years are potentially eligible for inclusion on the National Register of Historic Places, the listing of significant places maintained by the National Park Service (Department of the Interior 1990: i). The National Register utilizes the twin concepts of significance and integrity as a means to evaluate a property's eligibility for placement in the list. While significance is crafted in the narrative statement that identifies a property's justification for historical importance, integrity is a subjective measure of how well a property's physical characteristics conveys its significance. The Register uses seven aspects: location; design; setting; materials; workmanship; feeling; and association, to help define integrity and guide determinations (Department of the Interior 1990: 44-45).

Because reconstructions lack integrity, as defined by the NPS, they do not usually meet eligibility for inclusion on the National Register. The NPS therefore evaluates reconstructions through Criteria Consideration E, guidance created specifically to evaluate reconstructed entities. This measure weighs a reconstruction's execution and evidence; placement; interpretive scheme; presentation; inclusion in a restored environment; and uniqueness within this
environment to assess reconstructed buildings as suitable for listing on the Register (Department of the Interior 1990: 37-38).

These four groupings of criteria, which have the potential to influence reconstructions in the US, are thought to provide a good framework for analyzing in situ reconstructions by looking at the case studies associated with George Washington. These four groups address not only the creation of a reconstruction but also address the success of elements of the built environment, which is where reconstructions exist after their construction is complete.

By focusing on a very small, yet diverse group of reconstructions, this discussion should elucidate the effectiveness and ethical merit of these reconstructions and prioritize these groupings of criteria. Ranking these groupings will form the foundation for a set of criteria to measure reconstructions and also provide guidance on which criteria provide a good measure of reconstructions and which criteria are superfluous or not appropriate to measure existing buildings and guide proposed reconstructions.

**Parallels Between the International Policies and Secretary's Standards**

The international policies and Secretary's Standards were both developed to help guide and direct the creation of reconstructions by historic sites. The first two principles agreed upon by all the international policies are also part of the Secretary's Standards. These ideas: reconstructions should utilize extensive
evidence and be identified as a reconstruction, can therefore be thought of as two
tenets so important that they transcend place and time and provide the foundation
of excellent reconstructions and by extension a means to measure the quality of a
reconstruction. Because these concepts contain breadth and depth, this chapter
reviews ideas of evidence and identification to explore questions of how much
evidence is adequate, the impact of the identified reconstruction on the visitor, and
how differences in identification and evidence are reflected within the sites and the
visitor experience. This discussion helps structure these ideas to assess
reconstructed buildings.

Evidence

Evidence is mentioned in the international policies, the Secretary's Standards and
also Criteria Consideration E. These entities call for extensive evidence to be
utilized in reconstructions. The US specifies that besides needing extensive
evidence, a reconstruction must also be necessary for the public to understand a
historic site (Department of the Interior 1995). This caveat suggests that while
much of the national literature positions reconstruction in the US as a building
treatment, there is an understanding that they function in an interpretive manner as
well. The following discussion therefore is separated into two parts: an
exploration of the data to determine how to measure and weigh types of evidence;
and how to determine if a reconstruction is necessary for an understanding of a
historic site.
Strengths and Limitations Of Different Types of Evidence

The idea that a reconstruction should utilize the largest possible body of evidence is clearly fluid through time as scientific methods and advances in research create additional types of evidence upon which to base a reconstruction. It is understood that obviously the greater the evidence the less conjectured a reconstruction will be. The addition of archaeological evidence during the 20th century can be seen as a benchmark which benefited not only details about the footprint of a building, but also about the interior structure and function of a building. During the initial wave of Washington reconstructions prior to World War II, the lack of scientific archaeological excavations is evident, as is the reliance upon memory as a source of evidence. Archaeological excavations were only beginning during the 1930s at Washington sites, and while Washington's Gristmill, Miller's Cottage and Mount Vernon's Coach House utilized excavation to place the buildings on their original foundations, it was the rebuilding of Fort Necessity in the 1950s where archaeology first truly informed a reconstruction associated with George Washington. The use of archaeological data provides an additional body of evidence to help avoid conjecture within a reconstruction and the inclusion of archaeological evidence is an important factor in the quality of a reconstruction.

While the reconstructions in this study fall into two temporal groupings, the slow and sporadic growth of historical archaeology as a discipline did not create a certain point when professional archaeological expertise was utilized by historic sites. Fort Necessity clearly benefited from Harrington's fieldwork in the 1950s
while other sites took decades longer to embrace historical archaeology as a means of learning about the past. Early sites often incorporated excavation into the reconstruction process, but these non-professional forays into the archaeological record were only useful for identifying foundations to guide the placement of the reconstruction (Mount Vernon's Coach House and Greenhouse / Slave Quarter, Washington's Gristmill and Miller's Cottage), or large artifacts to inform the reconstruction such as the waterwheel at Washington's Gristmill, or the keystone for Greenhouse / Slave Quarter window. Misidentified remains also created inaccurate reconstructions as with the first reconstruction at Fort Necessity or Washington's Birthplace.

If reconstructions of Mount Vernon's Blacksmiths' Shop, Dung Repository, or Washington's Distillery had occurred when their physical remains were initially examined it is clear they would have resulted in reconstructions vastly different than what the later professional archaeological excavations suggested they should look like. The initial government work at the Distillery uncovered a foundation 15' shorter than what historical documents and subsequent excavations discovered. Likewise, the 1930's view of the Dung Repository was of a continuous brick foundation, not the hybrid structure professional archaeologists identified in the 1990s. The Blacksmiths' Shop's reconstruction has also benefited from its long planning process. It is unlikely a reconstruction based upon the work prior to the 1980's excavation would have resulted in a post building, and a sketch of a proposed reconstruction drawn by Walter Macomber in 1967 shows a continuous
brick foundation on his clapboard vision (Figure 15). An earlier reconstruction of the Blacksmiths' Shop would also have had to conform to Mr. Wall's idea of what such a structure looked like and from the surviving records of the debate it is clear that his vision did not include post-in-ground buildings of a utilitarian nature within sight of the exalted Mansion.

Unfortunately, professional archaeological fieldwork that informs a reconstruction is not a magical cure as all reconstructions utilize some level of conjecture. Archaeological fieldwork generally does not generate data about building height, roofline, roof treatment, window placement, or the other questions that must be answered to construct a three-dimensional reconstruction. Yet three-dimensional reconstructions demand decisions about these details to be made. For many of the newer or proposed reconstructions, the validity of these choices is difficult to assess because not enough time has elapsed to independently evaluate the scholarship or for additional evidence to be uncovered. For the older reconstructions these decisions can be appraised and in some cases the reconstruction remains a valid attempt at presentation (Mount Vernon's Coach House and Greenhouse / Slave Quarter, Fort Necessity), while for others (Washington's Birthplace, Valley Forge cabins, Washington's Gristmill) the reconstruction are not justifiable and therefore these buildings do not stand the test of time.
When officials with Virginia's Department of Conservation and Economic Development reconstructed the Gristmill in 1932 they ignored documentary evidence that clearly stated the 1770 mill was two stories. It is not known why the change was made but perhaps a three-story mill was deliberately constructed so that it would be more imposing on the landscape. R.E. Burson, the project manager, did adhere to physical evidence and built a mill with an interior, pitch-back water wheel, something quite different from many extant mills which maintain a waterwheel on their exterior (Burson 1932). Placing the water wheel inside moved the most easily identified component of the mill away from the street, and it is possible that the extra height was added as a result of not having anything on the exterior to advertise "Mill."

More than any other site in this study, Washington's Birthplace suffers from a misuse of evidence. The placement of the reconstruction was primarily based upon memory rather than historical or physical evidence. In fact, the Memorial Association ignored physical evidence and the National Park Service silenced new archaeological evidence that suggested the reconstruction was being executed in the wrong place. In the case of the Birthplace, the individuals planning and executing the reconstruction did not hold physical evidence in the same regard as memory and their own concept of what Washington's ideal birthplace should look like (Bruggeman 2006, 2005; Gilmore, Moyer and Alblinger 2001).
Physical evidence was not universally discarded by non-archaeologists. In the two projects at Mount Vernon supervised by Walter Macomber, physical evidence was considered more reliable than documentary evidence, understanding that documentary evidence merely showed what was planned while physical evidence provided the remains of what was built. Even the reconstruction of the Mount Vernon Coach House, perhaps the earliest reconstruction in the Chesapeake region, utilized physical evidence ensuring its location was legitimate.

The Valley Forge cabins are an excellent example of how documentary evidence can be interpreted in various ways. The many disparate examples of cabins at Valley Forge are constructed using the same piece of documentary evidence, Washington's 1777 order (Fitzpatrick 1933: 171). They illustrate that interpreting evidence can result in a myriad of vastly different structures. Recent archaeological excavations have discovered that the cabins at Valley Forge relied less on the Washington's written order and more on practical and logistical factors (Geier, Orr and Reeves 2006; National Park Service n.d.; Orr and Geier 2006). These reconstructions will suffer from inaccuracies until the reconstructed cabins show this variability present at the winter camp.

Physical evidence, like documentary evidence, must be read and evaluated and the act of interpretation places the same limitations upon it as the Valley Forge example illustrates for documentary evidence. At Mount Vernon's Dung Repository, Morley Williams interpreted the archaeological remains as a
continuous brick foundation while Dennis Pogue interpreted the same site as having a mix of masonry and post construction. A similar interpretive difference occurred at Mount Vernon's Blacksmiths' Shop where earlier investigators advocated a brick foundation based upon the physical remains rather than the post supported structure being reconstructed that was interpreted by later archaeologists.

As these examples illustrate, the ability to gather, interpret and analyze evidence before deciding to reconstruct is an important component in creating a valid structure with little conjecture. The decision to reconstruct, in many cases, is made before a thorough review of the evidence is undertaken. Washington's Birthplace, the original Fort Necessity, and the Valley Forge cabins are all examples of reconstructions decided upon before a proper study. At Mount Vernon, the institution's conservative approach slowed the reconstruction of the Greenhouse / Slave Quarter until extensive documentary evidence was discovered. Unfortunately, this project would have undoubtedly benefited from archaeological excavation as well and while the reconstruction is accurate when viewed against the two period illustrations, I can only imagine how much more advanced the outcome could be, not to mention the important archaeological resource, which was completely destroyed with no investigation or data recovery.

Even modern reconstructions, studied and planned by a full professional team of archaeologists, architectural historians, and restoration specialists, such as at
Washington's Distillery, are faced with many questions that evidence can not answer, as well as conflicting lines of evidence without a single answer. In the case of the conflicting lines of evidence, it appears that if all evidence is weighed equally the person in charge of the reconstruction has the power to choose which evidential line will be incorporated. Walter Macomber felt archaeological evidence was the most compelling as it represents what was actually executed.

At many sites, especially in earlier reconstructions, archaeological evidence was not in keeping with the idealized view of the past. The orderly rows of cabins still visible at Valley Forge, the original Fort Necessity and Washington's Birthplace are examples of reconstructions that disregarded or did not incorporate archaeological data because it differed from the documentary evidence and the creator's vision for the reconstruction. In these three instances, as well as examples such as the Saugus Iron Works, Colonial Williamsburg's Capitol and the first iteration of Booker T. Washington's birthplace, physical evidence was disregarded, or not sought in the most rigorous method, in favor of construction that was unsubstantiated by evidence, yet illustrated the image of what those in charge wanted to see (Hill 2001; Jameson 2004b; Jameson and Hunt 1999; Linebaugh 2005, 2004, 1996; Lounsbury 1990; Nowak, Foulds and Troutman 2004). Making a reconstruction better than it was or to "gild the lily," brings the building in line with a contemporary view of the past and is one of the risks inherent in the creation of reconstructions.
"Gilding the lily" is still done today, as illustrated by the spacious and well-furnished distillers' lodgings in the Distillery illustrates, and because reconstructions are direct reflections of their construction period and creators, illustrating their philosophical view of the past, they provide an insight into these individuals and this time period. The debate over Mount Vernon's Blacksmiths' Shop is the story of two men with different mental images of Washington's plantation; Washington's Birthplace is the tale of a woman determined to show the site in terms she understood; the decision not to reconstruct Washington's Distillery in 1932 illustrates contemporary attitudes towards alcohol. Reconstructions, whether accurate or not, are always modern constructs and as buildings do not serve to present an authentic past. They are reflections of their construction period and therefore reveal the thoughts of those in charge. Reconstructions are effective stages for presentation of the past, but should not be confused with something of the past.

Additionally, modern codes, life-safety issues and economic convenience also work to make a reconstructed structure "better" than it ever was before. Washington's Distillery has two modern stairs; the Gristmill has railings so the modern miller does not plunge into the wheel pit; Valley Forge's cabins are reinforced with concrete; and Fort Necessity has plastic posts below ground. Whether for visitor safety, code enforcement or long term maintenance, most reconstructions are both forced to and choose to compromise accuracy on these issues.
When there is no evidence to inform specific decisions, the professional in charge is again called to guide the reconstruction. A three-dimensional reconstruction demands decisions to be made. Unlike other physical interpretive options and two-dimensional and virtual reconstructions, where the unknown element can be eliminated or multiple choices depicted, three-dimensional reconstructions demand that each element be decided. For many of these decisions, especially those elements that are above ground (e.g. roofing, windows, exterior treatment), and therefore not archaeologically visible, there is often no evidence what-so-ever to guide the work and decisions are based upon similar or representative types of buildings, ideas of how the structure should look and how it will function with visitors. Reconstructions that rely solely on representational evidence are no longer favored by NPS policy. It is not justifiable to destroy an archaeological site to construct something that is not supported either through direct physical and written documentation. When there is not extensive site-specific evidence for a reconstruction then it should not be attempted. Likewise, existing reconstructions that were built upon a foundation of representational evidence should be evaluated and those that are not accurate should not be maintained. Reconstructions do too much damage to fabric and in the perceptions of how the past was that they should not be built without the highest level of accuracy possible.

With so many forms of evidence which type of evidence is preferable or better? The examples utilized in this study suggest that physical or archaeological
evidence should be utilized more strongly than documentary evidence for the elements that are addressed through archaeological remains. As discussed, physical evidence has severe limitations and cannot answer many of the questions posed by a three-dimensional reconstruction, but for those that it can address it should be weighted more heavily than other lines of evidence.

Site-Specific (Primary) Evidence Versus Representational (Secondary) Evidence

The terms "primary" and "secondary" are commonly used to distinguish historical documentation rather than to refer to physical evidence, but similar to historical research, evidence for reconstructions can also be divided into site-specific (primary) evidence, and representative (secondary) data. Tangible remains can be thought of, and have the same advantages and limitations, as primary and secondary documentary sources.

The Advisory Board on National Parks, Historic Sites, Buildings, and Monuments initial meetings in 1936 include much discussion on "physical source material" and suggest that this evidence should be given the same care and treatment as documentary sources (Chatelain 1936; National Park Service 1936). Primary, or site-specific remains, are the authentic ruins of the entity being reconstructed and therefore provide the most compelling evidence for a reconstruction. This evidence should be utilized and treated with the most care and respect because it is the definitive record of what actually existed at a location. As the case studies illustrate, the primary evidence often interprets documentary data in different
ways, as at Valley Forge where physical remains of the cabins has shown great variation and less standardization than the documentary sources suggest.

Primary evidence has the limitations that almost all archaeological remains possess -- it is difficult to discern much about a building beyond the footprint. Additionally, when the physical remains are ambiguous or difficult to decipher, their usefulness is limited and cannot provide definitive statements upon which to base a reconstruction. Even with these limitations, this type of data is more reliable and therefore should be utilized and weighted more favorably than representative or secondary evidence.

Secondary historical sources are especially important for filling in missing details, as the Peters's drawing supplied for the reconstruction of Mount Vernon's Dung Repository. They can also help understand the relationship between physical remains and documentary references, as the period distilling manuals did at Washington's Distillery. A common example of secondary archaeological evidence is how excavations of earthfast architecture provided a representative understanding of this construction type utilized during the study of Mount Vernon's Blacksmiths' Shop and Dung Repository.

Secondary data have many drawbacks, however, and Washington's Birthplace illustrates the limitations of this source. When the Wakefield Memorial Association drew upon secondary sources their models were Gunston Hall and
Mrs. Rust's family home, both of which were poor representative choices. The secondary sources utilized must be justified or at least be applicable and not chosen randomly, as the birthplace illustrates.

How Much Evidence Is Enough?
The discussion of differing lines of evidence and the benefits of each, leads to the question how much evidence is enough and how does a manager know when there is enough evidence to warrant a reconstruction? This subjective question has no clear answer. Because many strategic decisions are not in the purview of the manager but lie with administrators, boards and development officers, the decision to reconstruct often precedes the scholarly gathering of evidence. This study clearly illustrates that decisions to reconstruct are administrative decisions rather than academic pursuits. Fort Necessity, Washington's Birthplace, the Gristmill and Miller's Cottage, the cabins at Valley Forge and Mount Vernon's Coach House are all examples of reconstruction plans moving ahead of data gathering. The other sites at Mount Vernon were reconstructed only after extensive historical research and with the exception of the Greenhouse / Slave Quarter, archaeological research. Mount Vernon's conservative approach to reconstruction seems to work in favor of utilizing diverse sources of evidence and this policy seems to have served that institution well.

But too often projects with extensive archaeological excavation, like Washington's Distillery and Mount Vernon's Blacksmiths' Shop, are motivated by a desire to
recover enough information to accurately reconstruct the site. As conservative as Mount Vernon's approach to reconstructions is, the fact remains that the Association has chosen to interpret missing elements of the plantation landscape through reconstruction. Archaeological research projects have the recovery of data for a reconstruction as one goal within various other social, historical and cultural questions. Currently, Ferry Farm, Washington's Boyhood Home near Fredericksburg, Virginia, is undergoing an extensive multi-year archaeological study. David Muraca, the Director of Archaeology, states that this study is designed to locate the remains of Washington's home for reconstruction. Plans presently call for the reconstruction to be ex situ and therefore not impact the remains of the authentic Washington home. The site of the replica will, however, be placed upon the location of a 20th-century building (Muraca 2007).

Additionally, there are numerous sites currently being studied in the US with reconstruction as the overt goal announced at the outset of the specific projects (e.g. James Monroe's Birthplace, VA; Elk Landing, MD) (Historic Elk Landing n.d.; James Monroe Foundation n.d.).

While the amount of evidence needed for a reconstruction cannot be quantified, this study shows that most accurate reconstructions are the result of more extensive research working to merge all available lines of evidence. Accuracy is enhanced when multiple lines of evidence are utilized and when there is not a conflict within these evidential lines. Harrington's work at Fort Necessity merged historical research with physical evidence and the result is a site which is easily
interpreted and whose significance holds meaning and is clearly conveyed. Washington's Birthplace, on the other hand, ignored and lacked sufficient evidence and the reconstruction is not an accurate portrayal and difficult to rectify within the interpretive framework.

**Reconstructions Are Not Conjectural or a Representation; Reconstructions Do Not Reflect Designs That Were Not Constructed**

Two of the six Secretary's Standards are related to evidence but add statements against representation, conjecture and planned yet unexecuted designs. These are both sound criteria for measuring reconstructions and should be used to assess the effectiveness of any planned or existing reconstruction. Of the Washington case studies, both Washington's Birthplace and the Valley Forge cabins clearly do not meet this standard, while the other sites fare better.

The many issues with the Birthplace are discussed at length in Chapter Four and while the Valley Forge cabins are interesting in illustrating how interpretation of evidence can lead to many designs, both these sites represent building designs that have no connection with the verifiable past, and are therefore merely representative structures. They create a misleading view and in both cases this is a grander and more regularized and symmetrical snapshot of history. Washington's Gristmill, while not as egregious an execution as the former two sites, contains an additional story, conjectured to make this site appear more imposing on the landscape. Finally, the Storehouse within Fort Necessity is based upon
documentary evidence and representation, because no archaeological remains were identified. This feature at Fort Necessity does not meet these standards.

**Essential to the Public Understanding of the Property**

The Secretary's Standards couple evidence with the justification that reconstructions combine adequate data with an interpretive necessity for the reconstruction to exist. The notion that any reconstruction is interpretively "essential" is difficult to measure. Most reconstructions add a great deal to a site's interpretation and visual impact but whether they are essential for public understanding is doubtful given the many other means by which a specific entity could be interpreted. Therefore this idea is of little use in guiding the appropriateness of a proposed reconstruction. In fact, because a creative manager can easily write a successful proposal for any reconstruction, this tenet becomes an easy way for a site to justify reconstruction. "Essential for the public understanding" does not make the creation of reconstructions more selective at all.

Although the Secretary's Standard is not a good measure for reconstructions, National Register Criteria Consideration E addresses a related, yet less subjective topic within "suitable environment." This concept includes identification as a reconstruction, that the building be constructed in its original location and it also specifies that the reconstruction be appropriately interpreted. The stipulation of interpretation is a better assessment measure than being essential for the public understanding. Intention and actual interpretation utilizing the reconstruction is an
excellent way to assess reconstructed buildings. Interpretive plans for proposed reconstructions can be measured by how well the historic site interprets themes or subjects which the reconstruction will address, and can use existing programs and publications as a measure of their commitment to these narratives. Effective interpretation is an essential factor in the quality of the reconstruction and this has a direct relation to justifying if a reconstruction is worth the destruction of archaeological data.

Mount Vernon's reconstructions serve to flesh out the character and personality of George Washington and the plantation layout. Reconstructing buildings, like slave quarters that are typically no longer extant, provides an opportunity to interpret this story for the visitor. Although delayed for several years, with the opening of the interpreted Slave Quarter, Mount Vernon's visitors could see the home of slaves in the same interpretive method as George Washington's home. Unfortunately, visitors continue to see only ¼ of the space devoted to quarters. At what point does interpretive space become redundant when it makes the statement about the numbers of enslaved individuals who created the plantation?

Overall, Washington's Distillery appears to fit well into the broader agricultural theme begun in the 1990s by Mount Vernon. The interpretation in that structure completes the farming story and allows the site to expand the story of Washington the businessman begun in the adjacent Gristmill. Both the Distillery and Gristmill utilize costumed interpreters constantly engaged in doing active interpretation.
Both structures are interpreted in the same manner. The lack of interpreted slave quarters, separate or incorporated within another building, is a serious omission at Washington's Gristmill and Distillery and causes that interpretation to be diminished in favor of technology, economics and white managers rather than laborers. Because physical or documentary evidence for these quarters is currently not available, their presence at the site would have to be completely conjectured.

Mount Vernon's Blacksmiths' Shop, however, while rounding out the landscape and filling an inauthentic void on the plantation, will be the only building in Mount Vernon's historic core to utilize costumed practitioners of a craft. Because most of the surrounding buildings are all historic structures there is little chance the Association will populate them with living history. These historic buildings are treated with extreme reverence and even the reconstructed Greenhouse / Slave Quarters is not utilized as a venue for living history. A working Blacksmiths' Shop will be an anomaly and the resources being spent on its construction and interpretation of the blacksmithing craft could be better spent elsewhere to group this type of interpretive scheme together.

Mount Vernon's Pioneer Farm site, for instance, is a living history exhibit and a working blacksmith shop would meld better into this environment than in the static historic core. The Association chose this location to replicate the quarters for enslaved field workers. The replicated quarter, which opened to the public in 2007, incorporates African Americans employing first-person interpretation and
visitors are encouraged to ask questions and handle the furnishings. The Pioneer Farm exhibit more than the static historic core would provide a more suitable environment for the living history type of interpretation proposed for the Blacksmiths' Shop.

From a purely educational view, mixing interpretive methods may be more egregious than constructing inferior reconstructions (Esquerra 2007; Miller 2007). The combination of reconstruction methods, as previously and currently seen at Washington's Gristmill and Distillery and at Washington's Birthplace, highlights and reinforces the interpretation of the reconstruction while diminishing the interpretation of the structure not reconstructed. Today, the interpreted living space of two white distillers places more weight upon their story than the story of the six enslaved distillers who are only verbally interpreted as workers rather than shown inhabiting the site as their white counterparts are. For years, the Distillery was only outlined and the juxtaposition of reconstructed Gristmill with outlined Distillery elevated the legitimacy of one, uniting Washington with America's agrarian past, while diminishing and removing Washington from his role as alcohol producer.

Likewise, the difference in interpretive method between the inauthentic yet constructed Memorial Mansion and the authentic but only outlined site of Washington's birth continues to prominently reinforce the former at the expense of the latter. Mixed interpretive methods at a site do not permit a greater public
understanding. As these case studies suggest, site administrators should be encouraged to pursue quality reconstructions if their sites contain extant structures to ensure interpretation fully addresses multiple points of view and diverse inhabitants. At the very least, sites should not mix interpretive styles and interpretive methods without fully understanding the ramifications this places upon the "essential public understanding of the property."

Identified as a Reconstruction

The second element of the international policies, that reconstructions should be identified as such, is also part of the Secretary's Standards. The idea that reconstructions should be identified is an indication that the professional community understands that it is easy for three-dimensional reconstructions to be mistaken for original buildings and that there is a concern that visitors be aware of this distinction. Site visits, undertaken from 2002 - 2005 to the sites included in this study, discovered that each acknowledges somewhere on the property that these are reconstructions.

Two reconstructions go beyond identification to interpret their modern construction. Fort Necessity maintains a small exhibit describing Harrington's archaeological discoveries, but does not delve into the documentary evidence for various fort constructions. The Distillery also has a small exhibit on its second story where one panel discusses the evidence for, and construction of, the reconstruction. Both these exhibits present their data in a dogmatic fashion
making no attempt to illuminate conjectured elements or the many assumptions made in constructing the building for the visitor. No other site in this study makes an attempt to present the evidence utilized in their reconstruction.

While these two sites acknowledge their reconstruction through exhibits, no site illustrates the full process of creating the reconstruction – which elements were based upon multiple lines of evidence; which evidence were chosen during conflicts; and which elements were conjectured. It is assumed that this level of discussion is not undertaken by historic site staff because to deconstruct the reconstruction undermines their presence. With the advent of the Internet, this level of documentation could be presented for visitors to absorb before or after a site visit.

Mount Vernon's three standing reconstructions (Dung Repository, Coach House, Greenhouse / Slave Quarter) are all identified as reconstructions on their interpretive signs. Outbuildings are not part of a guided tour at Mount Vernon and therefore verbal acknowledgement of these buildings as reconstructions is rare, although the Greenhouse / Slave Quarter is sometimes verbally interpreted as a reconstruction during seasonal landscape and slave life tours. At no point during the Mount Vernon experience is the process of creating these reconstructions interpreted. For a brief time during the early 1990s, there was a sign at the extant Ice House interpreting the earlier Blacksmith Shop, but this was taken down after it was decided that interpreting two points in time at one site was too confusing.
and contrary to Mount Vernon's goal of presenting a tangible, three-dimensional landscape. There is a small exhibit of blacksmithing artifacts and a watercolor of the proposed Blacksmiths' Shop reconstruction in the Archaeology and Restoration Museum housed within one of the reconstructed slave quarter wings, but this museum is to be dismantled in the near future (MVLA 2000).

The process of creating a reconstruction is not interpreted at Washington's Birthplace or Valley Forge. The story of Washington's Birthplace showed how the Park Service has wrestled with the interpretation of that building culminating in a designation that downplays the reconstruction aspects of the structure in favor of its designation as "memorial mansion" (Hudson 1956: 29) yet they continue to interpret and maintain this structure on the landscape. At Valley Forge, numerous cabins are depicted around the park but there is no interpretation accompanying them and one must seek out their identification as reconstructions. Variation among the cabins, due to being constructed throughout the 20th century, is sometimes subtle and difficult for the visitor to distinguish or make sense of.

Employing reconstructions with minimal interpretation is a technique by which the historic site allows the largest number of visitors to easily comprehend and interpret the landscape. Of the sites in this study, Mount Vernon's large numbers of visitors force interpretation that is quickly comprehensible with minimal staff interaction, and can serve thousands of visitors at a time. This method seems justifiable at Mount Vernon because it does welcome such large numbers of
tourists but the museum should utilize the Internet or gallery space to provide additional details about the decisions and process of reconstruction and site interpretation.

None of the other sites in this study interpret the story of their reconstructions in their entirety and, unlike Mount Vernon, they cannot blame the lack of discourse on visitation pressures. While most historic sites might not possess on-site gallery space to delve into this level of detail (possibly of interest to only a few hundred people a year) it is a shame that with the possibilities of cyberspace historic sites fail to utilize this medium to advance their stories and engage those visitors who seek to understand and perhaps become part of the decision making process.

A site could utilize an interactive website to present the universe of evidence available for a reconstruction and encourage users to evaluate and construct based upon their interpretation of this evidence. Additionally, the building as reconstructed could be presented with the rationale for individual choices illustrated and explained. This presentation would be helpful for people planning to visit a specific site as well as for those who cannot travel to the site. Also, the detailed data could be brought on site to enhance actual visitation.

The lack of discourse undertaken by most historic sites creates a sense of empowerment by which the visitor can "come to some conclusions on your own" (Rosenzweig and Thelen 1998: 106). Yet at some point this also does a disservice
to the public by not allowing them to be part of a larger understanding of the past. As Rosenzweig and Thelen (1998) discovered, visitors do not realize the level of interpretation and choice embodied in presenting a historic site. Visitors perceive a simplicity and familiarity inherent in reconstructions and this does not elicit conversations or questions about how we know about the past, which lines of evidence should be trusted, or even why one story is favored and deemed significant over another. Instead, these reconstructions present a static, authoritative vision with no room for questions, subtlety or nuance.

Historic sites do not build, furnish and interpret three-dimensional reconstructions to then enter into a discourse about their inaccuracies, conjectural elements and evidential paths followed to create them. It is not surprising that reconstructed sites do not present more information to the visitor. A primary reason for choosing reconstruction is that it presents a real, tangible presence on the landscape. At places like Mount Vernon, where reconstructions are filling in missing elements, the idea is not to lead the visitor on an exploration of conjecture, possibility, or uncertainty; the goal is to present a "real" structure which melds seamlessly with the authentic ones, so that the visitor can see, feel and experience what the buildings, and by extension, what the past was like. In order to begin this mental time travel the visitor must suspend questions about the present and return to the "long ago", believing that what they see and experience is of the "authentic" past.

Does the public care that sites are reconstructed?
The pertinent question that arises from the subtle identification of these sites is not, "Are the sites identified as reconstructions?" but rather, "Does the public care that so much of what they experience at historic sites are reconstructions?" Because this study looks at reconstructions through an administrative and archaeological lens rather than how visitors perceive them, it was not designed, and therefore did not attempt, to conduct visitor surveys or discover how tourists to the Washington sites regard the built environment they experience. This question is addressed in management terms of visitation numbers, which translate into an economic benefit, as a measure of whether the public likes and accepts reconstructions.

Administrators perceive the most successful historic sites as needing something tangible to see and experience and this idea is motivating the current work at Washington's Boyhood Home and was used to justify reconstructions of Washington's Gristmill, Miller's Cottage, Fort Necessity, Washington's Birthplace and Valley Forge (Jameson 2004a; Muraca 2007; Stone and Planel 1999a). At Mount Vernon, where authentic buildings exist, reconstructions do not provide the sole attraction for visitors and therefore management justifies reconstructions for alternate reasons. These alternate explanations – to provide something new, to enhance interpretation, education and interpretive stories – are also used by the other sites in the study as stated additional benefits of reconstructions.

Administratively, the economic justification for reconstruction appears to be founded in truth. During the first season of the reconstructed, operating Distillery
visitation to Washington's Gristmill increased by 70 percent over the previous year (Rees 2007). Of course all reconstructions do not have this impact. The opening of the Stercorary failed to push up visitation numbers, but even that small reconstruction generated articles and media buzz providing a hook for publicity. Increased visibility and publicity is one of the most reliable factors to translate into increased visitation.

Several secondary sources, including tourism ethnographer Edward Bruner's ethnography (1994), and surveys conducted by historians Roy Rosenzweig and David Thelen (1998), Arkell European Fellow Jaane Rowehl (2003), and archaeologist Clara Masriera i Esquerra (2007) do address reconstructions from a visitor perspective. Rowehl (2003) and Brunner (1994) conclude that most visitors to historic sites are not seeking minute details about reconstructions, but are content to accept reconstructions as elements within an authentic landscape and create meaning through their own experience. Rowehl (2003) and Rosenzweig and Thelen (1998) discovered that visitors view historic sites and historic house museums as accurate because they are presenting an experience that is accepted by the visitor as authentic. Rather than question the accuracy of reconstructions, visitors accept them because they are part of institutions whose authority in conveying the past is not questioned. At historic house museums such as Mount Vernon and Washington's Birthplace, the familiarity of the home allows the visitor to feel both comfortable and able to easily comprehend and create meaning during the visit (West 1999; Wilson 2002). In fact, Rosenzweig and Thelen (1998)
discovered that visitors do not even always realize that historic sites and house museums are interpretations of the past. If visitors view sites as real and of the past they do not have a foundation upon which to query, or any reason to inquire about what they are viewing. They feel comfortable and state that at a historic site you "just can't help but go back to those days, feeling like you're there" (Rosenzweig and Thelen 1998: 105).

Rowehl (2003) discovered only a very small percentage of visitors view reconstructions unfavorably -- they are just too real and the accessibility of historic sites as a destination is too intoxicating. Esquerra (2007) suggests that those who object to reconstructions are better educated and prefer the gain in cultural capital embodied in a visit to a ruin rather than reconstruction. Despite their popularity, the presentation of a static, authoritarian past does not create the most effective exhibit either in terms of educational potential or ethical merit. Presenting the process of the reconstruction is an important element in creating the best reconstruction and this transparency would help ensure that the conjecture utilized, evidence reviewed and choices made are justifiable.

Divergences Between the International Policies and the Secretary's Standards

It is at this point that the international policies and the Secretary's Standards diverge. The last three tenets of the international policies: that reconstructions be easily changed as new evidence is discovered; reconstructions avoid disturbance to the archaeological record; and reconstructions not occur in situ, are not mentioned
within the US document. The Secretary's Standards permit onsite reconstructions as long as the archaeological record is recorded and care is undertaken to preserve or mitigate historic fabric. These differences between the two documents are very significant and it is this divergence in policy that helps perpetrate a culture in the US that constructs and relies on reconstructions as interpretive devices while masquerading as a treatment option for historic structures.

While the NPS, the agency responsible for cultural interpretation and maintaining cultural resources, as well as setting precedents for how historic sites are treated, might officially discourage reconstructions, in actuality, their Standards for Historic Buildings (Department of the Interior 1995) sanction reconstructions at the expense of the archaeological record with simple caveats for recording, or mitigating, the authentic, historic remains prior to construction. By contrast, the final three international points create a rubric discouraging the type of reconstructions discussed in this thesis.

**Easily Evolved**

By their nature, three-dimensional reconstructions are not easily changed, even with the discovery of new evidence. *In situ* reconstructions, however, generally destroy physical evidence and the proof only remains within the documentary record of the archaeological fieldwork. This makes multiple iterations based upon physical evidence rare. Inaccurate reconstructions are routinely retained upon the
landscape with no attempt to fix known inaccuracies during large maintenance and repair episodes.

The original reconstruction of Fort Necessity was a large, rectangular fort constructed utilizing existing landscape features and ignoring documentary evidence. It did not, however, use all the physical evidence available, in large part because the early date of this reconstruction meant historical archaeologists were not involved. Luckily, when Harrington began his archaeological study sufficient soils were undisturbed providing new evidence for the fort's layout. The subsequent reconstruction did a laudable job of merging the physical and documentary record. This less-imposing fort also visually interprets the idea that the fort was hastily constructed and this was a factor in Washington's first defeat. The original large, well constructed, imposing fort did not interpret this story as successfully.

The Fort Necessity model, however, is not commonly used as reconstructions age, are in need of maintenance, or as new evidence emerges. Within the last decade Washington's Gristmill underwent a major restoration of its interior, yet removing a floor from the Gristmill was never seriously discussed (MVLA 1995). J.C. Harrington commented on the reluctance of site managers to tweak reconstructions. "Almost any interpretation gains prestige by repetition and especially by publication, no matter what the qualifications of the author may be. It can gain so much prestige, in fact, that even new evidence will not be given
proper consideration...If one could see with their own eyes that the fort was diamond shaped, why pay any attention to these people who said it was round?" (Harrington 2003: 14-15).

Wrong and misleading buildings are maintained because site directors and managers are reluctant to dismantle brick and mortar construction due to expense or because of, as Harrington suggests, the influence of the physical reconstruction. The NPS was aware prior to completion of the inaccuracy of Washington's birthplace yet they continue to maintain the structure. Their admittance that the site was erroneous and merely a representation of an extremely wealthy period home did not occur until the build-up to the American Bicentennial in the late 1960s (Beasley 2001; Bruggeman 2006, 2005). Today, the NPS continues to operate and interpret the building. I interpret their reluctance to dismantle the Memorial Mansion because the building's presence fosters the interpretation that Washington birthplace is worthy of his stature.

In the US, reconstructed sites, as do all buildings, meet a chronological threshold when they are 50 years old. At this point, the reconstruction "may attain its own significance" for the story of its construction rather than what it interprets, and is often maintained as if it were original (Department of the Interior 1990: 38). Reconstructions can then be evaluated for potential integrity and significance within the National Register structure. George Washington's Gristmill and Miller's Cottage are listed on the National Register for what they reveal about the history
of Virginia's state park system and Fort Necessity, Washington's Birthplace and Valley Forge, like all National Parks, are also on the National Register. While inclusion on the Register does not preclude changing inaccuracies in a reconstruction, it does give the inaccurate reconstruction a new sense of importance and potentially makes modifications even less likely to occur. Carl Lounsbury (1990) documented this reluctance to change a reconstruction at Colonial Williamsburg's Capitol. Once a reconstruction appears the illusion that it is real combined with the economics of construction make administrators reluctant to remove them. Because reconstructions should be as accurate as possible, this attitude does not educe the most effective reconstructions. Reconstructions should evolve with evidence and advances in research. Inaccurate and wrong reconstructions should not be maintained upon the landscape.

Avoid Disturbance to the Archaeological Remains and No In situ Construction

Versus Mitigation of Features

The fourth and fifth points of the international policies are interrelated and further discourage, the types of reconstructions detailed here. In situ reconstructions, by their nature, damage archaeological remains and erase the continuum of a site's history forcing one temporal focus upon the landscape. Therefore, to avoid disturbance to the archaeological record in situ construction can not occur – or they have to be thought out and implemented in such a manner as to completely avoid disturbing the below ground resources and unfortunately, this level of precaution and planning is rarely undertaken in the study area. The most obvious
method of protecting buried remains (besides moving the reconstruction) would be
to elevate a reconstruction and even this does not guarantee protection to the
archaeological record. Because the NPS views reconstructions as a treatment
option and encourages on site interpretation, the Secretary's Standards, unlike the
international principles, specifies mitigation of surviving archaeological features
and relationships.

The earlier sites in this study were not subjected to a full archaeological mitigation
or if they were, excavated artifacts and records do not survive. The Valley Forge
cabins were not studied archaeologically until the 1960s; artifacts from
Washington's Gristmill, Miller's Cottage and Distillery are missing although a
short report of the excavation survives; no artifacts from the original work at Fort
Necessity, Mount Vernon's Coach House and Greenhouse / Slave Quarter survive
and only a handful of artifacts and field maps from the Blacksmiths' Shop prior to
the 1980's work are extant. Very little remains from the early excavations at
Washington's Birthplace although the excavation of Building X is well recorded,
as is the 1950's work at Fort Necessity (Bruggeman 2006, 2005; Gilmore, Moyer
and Alblinger 2000; Harrington 2003; Orr and Geier 2006; White 2004; White and
Leeson 1999). Today, the growth of historical archaeology and the increase in the
archaeological recovery of physical evidence makes it more likely that a full
excavation might occur prior to reconstruction. This is the case with the most
recent reconstructions at Mount Vernon and Washington's Distillery where
excavation took eight years.
Reconstructions, as modern buildings, are subject to the full gamut of health and life-safety codes causing their construction footprint to usually be larger than the historic building they depict. Additionally, foundations are often much deeper and more substantial and utility requirements along with complying to the Americans with Disabilities Act can mean a series of destructive trenches outside the building footprint as well as a larger footprint, more substantial foundations and extensive grading. Any mitigation planning needs to factor in the enormous destruction done by a modern building and ensure peripheral features are mitigated as well.

The reconstruction of Mount Vernon's Dung Repository did very little damage outside the footprint of the building. Because this building is a shed and visitors do not go inside there was no need for any of the modern requirements that cause damage to historic features and the peripheral soils. The building incorporated the surviving historic masonry and stone into the reconstruction preserving these materials in situ rather than transporting them to a storage facility. But this building is not typical of what is normally reconstructed.

A more typical building is Washington's Distillery, with internal interpretation on two floors. The reconstruction was elevated enough to preserve the cobble and rubble floor and extant portions of the stone foundation. While these features were "preserved," construction of the new Distillery included substantial concrete and other modern materials. These two features are still technically below ground but
it is unclear what remains of them, should a future researcher or manager wish to
uncover them. Burying them was both economical and practical compared to
complete excavation, although not the best method for the archaeological resource.
Both features were fully recorded, but as this case illustrates, mitigation and
recording does not justify the destruction caused by reconstruction. An exterior
furnace of the distillery was also preserved although this feature is not part of the
site interpretation and was safely buried. The Distillery's intact brick-lined well
was also buried and because of topography, construction of the modern well pump
did not impact this original feature.

Inside the Distillery, the construction of modern furnaces and drains threatened the
archaeological remnants of these features. Therefore, these were recorded and
completely excavated and dismantled by the archaeologists. Storage of the large
quantity of masonry mitigated from the site is an issue and it was recorded and
sampled with portions deaccessioned. Mitigation, no matter how
methodologically rigorous, impacts the authenticity of the historic record and once
artifacts, features, soils and their relationships are disturbed they become tenuously
reliant upon notes and curation to survive. The long term storage of artifacts and
field records does not have a successful history in the US, as evidenced by the
early sites viewed in this study and elsewhere (Beamon 2000; Bruggeman 2006;
1999).
Because visitors are allowed on the Distillery's second floor, meeting building code required changes to the footprint of the building by adding a modern bay with a second stair, egress and elevator, modifications to the historic stair, and a door in the store room leading to the modern extension. The extension required additional archaeological work and because this modification was not agreed upon until late in the design process, the mitigation happened as a separate, archaeological effort and not part of the original research excavation.

Overall, the Distillery is a story of archaeologists working as researchers, leaders and decision makers, fully integrated into the reconstruction team. But, even in this example, where funding, time and design were controlled by the archaeologists, the decision to fully reconstruct *in situ* was made early in the project and this *fait accompli* meant that the site would be destroyed either with archaeological fieldwork or without. In this case the goal became to do quality fieldwork and create the most valid reconstruction possible.

The final international tenets are designed to avoid *in situ* reconstruction and destruction of the archaeological fabric. As a measure of *in situ* reconstruction, the focus of this study, these do not provide a useful assessment. The Secretary's Standard, that mitigation of archaeological remains occurs, while not a good gauge of the success or failure of a reconstruction should be part of any *in situ* reconstruction assessment or guidance. To simply say *in situ* reconstructions cannot occur overlooks the fact that they are used throughout the world for
interpretation of the past. Is this best for the archaeological resource? No, but codification of this does not stem their occurrence. Instead, assessment and guidance should emphasize that research excavations precede decisions to reconstruct and that complete mitigation should always be utilized to record destruction of archaeological materials. Mitigation and the long-term curation and economic issues involved in removing an archaeological site should factor realistically into the planning process. The cost and storage space required for this makes many proposed reconstructions cost-prohibitive yet these numbers are not generally placed within the reconstruction budget either during planning or execution.

*Preservation of Historic Fabric and Relationships*

The Secretary's Standards specify historic fabric and the relationships of historic remains to each other are preserved. Because the Secretary's Standards allow *in situ* reconstruction, preservation of historic fabric becomes a difficult proposition. This is a good gauge to assess reconstructions, because the best reconstructions, as discussed, utilize archaeological fieldwork to gather evidence and mitigate destruction to archaeological remains. Making an effort to incorporate historic fabric and preserve relationships is really an extension of a complete archaeological package that begins with research and documentation and uses the conclusions drawn during this phase to plan a reconstruction that is sensitive to the authentic historic fabric remaining at the site.
The case studies suggest more recent reconstructions are more sensitive to historic fabric than the older reconstructions. The reconstruction of Mount Vernon's Dung Repository incorporated both the original cobblestone floor and extant gable walls into the new construction. Portions of Washington's Distillery are preserved below the new construction. It is thought the earlier reconstructions in this study did not preserve any of their historic fabric and probably very little of these relationships.

While the preservation of historic fabric is ethically a good principle and should be attempted, it is not realistic to assume that *in situ* reconstructions will routinely live up to this ideal. The impact of modern construction, code requirements for new construction and the lack of archaeological professionals involved throughout a project until the final inspection, make it almost certain that *in situ* reconstructions make a severe impact upon the landscape and when construction commences on original foundations it is almost certain that authentic, historic fabric will be completely destroyed.

**Conclusion of the International Policies' Universal Principles to Assess Reconstructions**

The international policies provide a good starting point for critically measuring *in situ* reconstructions but alone they fail to exhibit sufficient differentiation between sites. There is variation exhibited between sites measured against the principles that do not impose a requirement against *in situ* construction (evidence, identification, easily evolved) but the other two tenets are not as useful in
illustrating distinctions between *in situ* reconstructions (avoid disturbance to historic fabric, not *in situ*). The main reason for this is that these two principles are designed to weigh against *in situ* placement of reconstructions. This reconstruction subset collectively fails to meet these stipulations, and therefore it is impossible to view variation or distinctions between the examples. While the focus of this study is on American examples, *in situ* reconstructions exist globally to interpret the past. Criteria for the analysis of this type of reconstruction should not present a predisposition against *in situ* placement but be able to rank and evaluate the goals and effectiveness of the entity to assess their justification and operation. There should be some measure to guide decisions about *in situ* reconstructions.

While *ex situ* placement of reconstructions is the most advantageous scenario for the archaeological record, when attempting to analyze and compare reconstructions that are located upon their original location broader criteria are needed to develop a means to rank or seriate these entities. Criteria should include an attempt to weigh how the reconstruction is used in an educational or interpretive sense and how they meld into the fabric of their historic sites. Therefore, this study expands the discussion about reconstructions to seek guidance which might provide additional measures to address interrelationships between *in situ* reconstructions as constructed buildings.

**Conclusion to the Secretary's Standards**
The Secretary of the Interior's Standards for Reconstructions build upon the international principles and when used in conjunction with their first three tenets provide a good beginning for assessing *in situ* reconstructions. As the Washington case studies show, they do not go far enough in providing questions to compare and contrast reconstructions. Because they are standards and meant to be used as a "series of concepts" in thinking about during the construction of reconstructions, they do not take into account factors such as how well the reconstruction conveys a sense of the past for visitors -- the intangible quality that makes a successful reconstruction appear as if it is an authentic entity within its landscape (Department of the Interior 1995). The majority of the Secretary's Standards are concerned with evidence and ensuring that the reconstruction utilizes appropriate evidence. How the evidence translates into a finished building is not taken into account and this provides a gap in exploring means by which to critically evaluate reconstructions.

The National Register of Historic Places

One way to measure the effectiveness of how elements are interpreted and how well the site conveys its story is through concepts developed by the National Register of Historic Places. The Register identifies seven aspects of integrity to measure how well an entity conveys its significance. These aspects: location, setting, design, material, workmanship, association and feeling, were defined in Chapter Three as to how they can work within a discussion of reconstructions.
Because most reconstructions are not eligible for inclusion in the Register, the NPS developed Criteria Consider E to specifically help classify and assess the significance of reconstructions within built environments.

*National Register Criteria Consideration E and the Washington Case Studies*

When Criteria Consideration E, the specific direction for reviewing reconstructions as eligible for inclusion on the National Register, is applied to the case studies within this thesis, very few differences between the properties are illustrated. Mount Vernon's reconstructions all fall well within the Criteria because they fill in missing elements of a larger restored complex. The large numbers of extant structures at Mount Vernon diminish the impact of the reconstructed elements. Additionally, the Mount Vernon reconstructions, meet the first two parts of the Criteria -- they are "accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan" (Department of the Interior 1990: 37). Mount Vernon's conservative approach to reconstruction ensures that new buildings are only built after much thought and when they merge into an existing interpretive theme.

Aside from Mount Vernon, National Register eligibility is not an effective means by which to solely assess the case studies in this study and therefore is not a comprehensive measure for *in situ* reconstructions. Because they require extant structures be present within the cultural landscape, these criteria alone do not present a scenario that permits subjectively assessing the multitude of sites that do
not possess authentic buildings. As the case studies illustrate, sites such as Fort
Necessity fall short as they are the sole entity interpreted upon the landscape,
while Washington's Gristmill and Distillery or Washington's Birthplace also do not
rate because they sit within a completely reconstructed complex.

The impermanent nature of cultural sites within the US and throughout the world
almost guarantees that a large number are no longer standing upon the landscape.
As this study suggests, because so much of the cultural landscape is no longer
visible, assessment criteria should not immediately penalize a reconstruction
because no historical buildings exist. In developing a useful and productive series
of criteria by which to measure in situ reconstructions they should detect and allow
variability to be visible rather than negate the majority of examples outright. To
assess if an in situ reconstruction is effective and successful the framework needs
to measure the appropriateness of individual in situ construction and not require
historical, authentic buildings be present within the venue.

National Register Aspects of Integrity and the Washington Case Studies
To aid discussion, Table I provides an overview of how the sites in this study
fared when measured using the National Register's seven Aspects of Integrity.
Each reconstruction was rated to give a feel for the building using a subjective
"strong / weak" rating system. Buildings that exhibit a strong indicator are labeled
"y" (YES) on the table, while those that are weak are "n" (NO). Criteria which
are neither strong nor weak are "p" (PARTIAL). This checklist was developed to
help guide the study and focus discussion upon examples which seem to be more
successful at meeting specific criteria. Those that are more successful have higher ratio of "y" to "n." Rather than all sites meeting or failing requirements, the aspects illustrate variability within the group and serve to seriate the case studies, teasing out meaningful differences between the sites. This seriation or ranking of the Washington reconstructions suggests that the seven aspects provide an effective method to measure built reconstructions.

There are several overall generalizations visible in Table 1. The Mount Vernon reconstructions as a group appear quite strong while Washington's Birthplace and the Valley Forge cabins are both weak. This is not surprising and the discussion of reconstructions thus far certainly foreshadowed this. Fort Necessity fares very well, perhaps surprising since it not a recent reconstruction. One of the most recent reconstructions, Washington's Distillery is not as "strong" due to the setting in which it is placed.

**Location**

All sites except Washington's Birthplace and the Valley Forge cabins are strong for location. These sites did not utilize archaeological evidence to inform their situation and in the case of the Birthplace, the reconstruction's orientation is wrong. Mount Vernon's Dung Repository does an excellent job balancing the opposition of *in situ* placement with preservation (or mitigation) of archaeological remains within this criterion.
<table>
<thead>
<tr>
<th>Location</th>
<th>Location</th>
<th>Design</th>
<th>Setting</th>
<th>Materials</th>
<th>Workmanship</th>
<th>Feeling</th>
<th>Association</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fort Necessity</td>
<td>y</td>
<td>y</td>
<td>y</td>
<td>y</td>
<td>y</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Dung Repository</td>
<td>y</td>
<td>y</td>
<td>y</td>
<td>y</td>
<td>y</td>
<td>y</td>
<td>y</td>
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<td>Coach House</td>
<td>p</td>
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<td>y</td>
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<td>y</td>
<td>y</td>
<td>y</td>
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<tr>
<td>Greenhouse / Slave Quarters</td>
<td>p</td>
<td>y</td>
<td>y</td>
<td>y</td>
<td>y</td>
<td>y</td>
<td>y</td>
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<tr>
<td>Distillery</td>
<td>y</td>
<td>y</td>
<td>n</td>
<td>y</td>
<td>y</td>
<td>y</td>
<td>y</td>
</tr>
<tr>
<td>Gristmill</td>
<td>y</td>
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<td>y</td>
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<td>y</td>
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<tr>
<td>Birthplace</td>
<td>n</td>
<td>n</td>
<td>y</td>
<td>n</td>
<td>n</td>
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<td>n</td>
</tr>
<tr>
<td>Miller's Cottage</td>
<td>p</td>
<td>n</td>
<td>n</td>
<td>n</td>
<td>n</td>
<td>n</td>
<td>n</td>
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<tr>
<td>Valley Forge</td>
<td>n</td>
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<td>n</td>
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<td>n</td>
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<td>n</td>
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<tr>
<td>Cabins</td>
<td>n</td>
<td>n</td>
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<td>n</td>
<td>n</td>
<td>n</td>
<td>n</td>
</tr>
</tbody>
</table>

Table 1. The Aspects of Integrity and Washington Reconstructions.

Washington's Distillery also rates high for this element and it is hoped that the upcoming reconstruction of Mount Vernon's Blacksmiths' Shop will as well.

While the Distillery does not incorporate "authentic" fabric into the construction, large portions were preserved. Full mitigation was also carried out of sections that were impacted and professional archaeologists were involved in the construction through every phase of planning and implementation to make decisions.

While little of Fort Necessity was preserved below the reconstruction, mitigation was extensive and the natural elevation at the site is such that portions may be preserved. The location of the fort is excellent and when the NPS rebuilt the fort in the 1950s, the archaeological work was influential in the accurate redesign.
Likewise, Washington's Gristmill underwent some excavation and the discoveries were worked into the reconstruction. The other early reconstructions, which could rank highest for location (Washington's Millers' Cottage, Mount Vernon's Greenhouse / Slave Quarter and Coach House) since they are on their original foundations, did not undergo any archaeological work and therefore location is slightly decreased.

Design

For reconstructions to rank high in the aspect of design, they must illustrate a successful translation of evidence to construction. This accounts for a utilization of various evidential lines and a balance between both primary and secondary sources of evidence. The four Mount Vernon reconstructions all show excellent design characteristics, as does Fort Necessity. Washington's Gristmill and Miller's Cottage do not rank high for design. The Gristmill's elevation and the addition to the Miller's Cottage both seriously impact the buildings visually. Neither of these modifications is necessary for code and could be changed without altering visitor flow (visitors rarely go above the Gristmill's second floor) and thereby increase the accuracy of interpretation. The Distillery also includes an extension. Because this extension is necessary to meet life safety codes and it is clearly visible on both the exterior and interior as a modern extension rather than an authentic portion of the building it does not impact the visual design of the reconstruction in the same way.
The design aspect of Washington's Birthplace suffers from being based too heavily on spurious secondary evidence and a fabricated sense of the grandeur with which the physical embellishment of his birth demanded. The creators of this reconstruction designed what their Colonial Revival sensibilities wanted on the landscape rather than what the physical evidence and historical documentation suggested existed.

The various interpretations of the Valley Forge cabins also do not rank well for design. Like the Birthplace, these reconstructions illustrate how the period of construction influences what is built. The most successful reconstructions minimize this phenomenon. While recent archaeological investigation suggests there was variability to the original cabins' designs and they were placed asymmetrically upon the landscape, the existing reconstructions fail to convey this (National Park Service n.d.; Orr and Geier 2006; Treese 1995).

Setting
The aspect of setting looks beyond the reconstruction to the larger landscape assessing how the backdrop affects the presence of the building. As Criteria Consideration E suggests, reconstructions which are part of a restored or extant landscape rank stronger with setting than those that are completely reconstructed venues or within a limited physical space. Because the four Mount Vernon reconstructions are part of an extant restoration they rate extremely well. Their situation within a restored, rather than reconstructed, landscape fills in gaps and
enhances the overall setting of the plantation. The sheer scale of Mount Vernon today, and the excellent preservation of the viewshed across the Potomac River works extremely well in conveying a complete picture of an 18th-century landscape.

Fort Necessity, isolated within the low-lying meadow also conveys a strong sense of setting for the visitor. From the reconstruction, very little impedes the view and even visitor services, paths and roads are minimized so that the impact is on the solitary nature of the hastily constructed fortification. The presence of earthworks and forests further adds to the interpretation and it is easy to visualize this site's larger situation during a visit.

Setting is one of the few aspects that Washington's Birthplace conveys. The overall rural nature of Westmoreland County combined with the expansiveness of the Potomac River play a significant role in the setting for this site. While the structure itself is not a successful reconstruction, the setting in which it is placed works well and there is very little to distract the visitor. The addition of a kitchen and some associated buildings seem to add to the environment as well.

Washington's Gristmill, Distillery and Miller's Cottage do not convey their setting successfully, in large part because their contemporary site is too small. These three buildings sit on approximately three acres with a heavily traveled road forming one boundary and parking lot and modern houses forming a second. The
third boundary is wooded today while in Washington's time this was a combination of livestock pens, support buildings and cleared fields. Even the final boundary, Dogue Creek, is today so silted in it does not resemble the navigable waterway influential in the industrial complex's development. Infrastructure for the visitor appears especially incongruent at the site. Directly in front of the Distillery is a public restroom, paths appear oversized for the small scale of the historic site, and the Mill Race has a concrete lining and fence, both features that are neither authentic nor serve a clear purpose. Finally, the underground pumping system for the self-contained mill race is clearly visible, presenting an additional modern impact upon the small site (Figure 24).

The Valley Forge cabins also sit in a dissimilar landscape. The majority of the cabins are today sited along a modern road and bike trail near the National Memorial Arch, constructed in 1910. The presence of the cabins is completely removed from any attempt at historical interpretation or landscape restoration. It is difficult for the visitor to understand how the cabins work within the larger story of the Park. The lack of an appropriate setting for the cabins is reflective of the dual identity Valley Forge wrestles with today. More than any other site in this study, it serves as both a historical destination for visitors interested in the American Revolution and George Washington and because of its presence in an urban Philadelphia suburb it also serves as greenspace and has a recreational value for the local constituency (Valley Forge n.d.). Visits to Valley Forge during this
study suggested to me that this site struggles with its identity as a recreational and historical entity.

Materials and Workmanship

The definition of materials developed for this study assesses the accuracy of the fabric, how well it expresses authenticity and is based upon all available sources of evidence. Workmanship, or how well executed the materials are within the reconstruction and the accuracy of finishes and treatments, is closely related to materials. These two aspects relate to the creation of the reconstruction and are a testament to the technical building and manufacture of the construction. Because of the decisions required for a three-dimensional reconstruction, these aspects are subject to a degree of conjecture and secondary evidence can be quite helpful in this process. Additionally, the decisions on materials and workmanship are subject to compromise. Compromises necessary to meet health and safety codes can be understood but those due to a lack of evidence, budget constraints, or availability of materials are more difficult to rationalize.

Mount Vernon's four reconstructions rate high for both materials and workmanship, again, in large part to the existence of so many surviving 18th-century buildings as precedent in choosing wood, masonry color, size and bond, height other decisions needed for a three-dimensional construction. Besides these standing structures, Mount Vernon also has an extensive documentary and photographic record, which provides an extremely valuable source of evidence for
materials. The Ladies' reconstruction policy also bolsters materials requiring that all visible surfaces contain appropriate fabric and be finished in an accurate manner. Foundations and other hidden portions are not always constructed of correct materials, but anything a visitor could potentially see is as accurate as possible.

Washington's Distillery, because it was reconstructed under the auspices of the MVLA, also ranks high. While the foundations and flues are constructed according to modern code, allowing the building to operate as a distillery, all visible surfaces are accurate on the first floor. Because of modern health, safety and fire codes, the historic stair is heavily compromised, containing modern materials including a metal rail, and is completely enclosed. The structure of the second floor is very accurate in terms of materials and workmanship but the space is compromised.

To facilitate the visitor and the desires of the donors, there is a museum and video room rather than grain storage bins and possible sleeping quarters for enslaved workers. Two bedrooms, which had a great deal of documentary evidence and some archaeological evidence, are reconstructed and interpreted on the second floor, to the north of the museum. While the workmanship and materials of these rooms are very good, the interpreted spaces appear very large for housing a single, white, male supervisor. The furnishings in the rooms, based upon documentary evidence, include a canopy bed, window treatments, rugs and upper-scale
furniture, also serve to interpret these bedrooms at a higher standard than should probably be seen within an industrial building (Pogue and White 2005).

The Gristmill, like the Distillery, uses appropriate materials and conveys this aspect well. The exterior stone is the same type as the original building and the interior utilizes wooden fabric salvaged from a period mill during the initial reconstruction in the 1930s. The gears and mill furniture were completely replaced during an extensive renovation at the turn of the 21st century with accurate materials (Pogue and White 2005).

A team of restoration carpenters, headed by John O'Rourke and Gus Kiorpes, from Calvert County, MD, renovated the Gristmill, built the Distillery and Dung Repository, and will build the Blacksmiths' Shop. They were contracted to do these period reconstructions and have fashioned careers out of doing this type of repair and construction for many museum reconstructions and restorations in the region. Their understanding of period building techniques and superior craftsmanship is a major factor in the successful execution of these reconstructions (Pogue and White 2005). Especially for these two categories, the builder or craftsman is an important factor in how well the modern building is able to convey a sense of the past and whether it adds to the overall site interpretation and conveys authenticity for workmanship and materials.
Fort Necessity is also reconstructed of suitable materials, at least in what is visible. During a recent renovation, the NPS replaced the below ground portions of the posts with a synthetic material to increase longevity of the reconstruction but the above ground posts are of the same wood discovered archaeologically by Harrington in the 1950s (Fort Necessity 2003).

The sites exhibiting poor workmanship and materials (Washington's Miller's Cottage, Washington's Birthplace and the Valley Forge cabins) exhibit a host of problems. Decisions concerning what materials to utilize are often related to who will construct the building and as with the example of O'Rourke and Kiorpes at Mount Vernon, the construction manager or general contractor plays a large part in guiding the museum through the process of procuring materials and fabricating the building. A good contractor, with a strong sense of period craftsmanship and technique, will execute a better building. With these two aspects, evidence is enhanced or diminished with the craftsman's skills, costs, and an understanding of period construction techniques.

At Valley Forge there is visible concrete chinking in some of the cabins, along with other inaccuracies such as hardware (Figure 38). Washington's Miller's Cottage combines both accurate and inappropriate materials on both the exterior and interior, in part due to this building's function as part of the modern visitors' infrastructure. Washington's Birthplace also visibly utilizes inaccurate materials and because this building is not based upon an authentic precedent it makes the
materials more difficult to analyze. Both Washington Miller's Cottage and Birthplace are also poorly constructed with very little about their finishes or construction reminiscent of what they are meant to portray. The workmanship and materials in these buildings does not convey the stories with which they were reconstructed to interpret. Washington's Birthplace does not suggest a middling Virginia planter's family with its opulent interiors and elaborate trim and woodwork, while the Miller's Cottage fails to illustrate a middle class family's existence with its modern conveniences and Colonial Revival hardware.

Feeling and Association

These two related aspects are the most subjective and difficult to measure. They seek to assess how well a reconstruction conveys the sense of the past and the interpretive story, which it was constructed to transmit. A three-dimensional building's presence on the landscape imparts information to the visitor by its mere presence and this communication is at the foundation of these aspects.

Mount Vernon's four reconstructions, being part of a restored landscape, rank extremely well for both feeling and association. The creation of these buildings serves to fill in and expand the visitors' comprehension of the overall site and the buildings are easily understood and related to both George Washington and the 18th century, both by virtue of being near his home and within a landscape of similarly designed and interpreted buildings.
Overall the complex of Washington's Gristmill, Distillery and Miller's Cottage also ranks well for feeling and association, although individually, the latter structure does not convey these two aspects. While both the Gristmill and Distillery serve to advance and suggest a relationship with Washington and the industrial past of early America, the cottage alone does not elucidate any of these intangible links.

Fort Necessity is also successful in conveying to a visitor a greater understanding of Washington and the mid-18th-century colonial frontier. The fort is successful because of its sheer isolation. The reconstruction does an excellent job of showing how small and separate Washington's defense was and its placement in the meadow surrounded by woods illustrates these two aspects.

The Valley Forge cabins and Washington's Birthplace do not convey feeling and association successfully. The placement of the cabins combined with their lack of interpretation and their poor design and execution makes their presence more of a question than a statement upon the landscape. Likewise, Washington's Birthplace, which fails on so many levels to convey the aspects of integrity, does not impart accurate details about Washington, his family or the time period. The building's presence on the landscape communicates a story that is false and misleading.

**Conclusion: Proposed Criteria for Assessment and Comparison of In Situ Reconstructions**
The aspects of integrity combined with elements of the international charters, the Secretary's standards and Criteria Consideration E provide a useful measure by which *in situ* reconstructions can be compared and analyzed. For the best assessment, or understanding the benefits and shortcomings of a reconstruction, this study proposes the following list as a means to assess three-dimensional *in situ* reconstructions:

1. location
2. design
3. setting
4. workmanship
5. materials
6. feelings
7. association
8. based upon extensive evidence
9. archaeological fieldwork before deciding to reconstruct
10. complete mitigation before construction
11. engaging interpretation effectively utilizing the reconstruction
12. identified as a reconstruction
13. interpret the process and reconstruction decisions in some format
14. evolves with new evidence

This study suggests these fourteen points are useful principles by which variability between *in situ* reconstructions can be measured and individual reconstructions and proposed reconstructions can be analyzed.
The other principles explored in this chapter are not as useful to measure existing or proposed reconstructions because they present against *in situ* construction and therefore do not permit any seriation between examples of this type of reconstruction. Because this study seeks to evaluate *in situ* reconstructions from an administrative and professional standpoint, it seeks means by which differentiation between examples of this type are visible. American sites were chosen as the case studies because of their long history and high number of examples, but *in situ* reconstructions occur globally and it is felt that this study is applicable to this type of reconstruction world-wide. Rather than universally reject *in situ* reconstructions as unethical, the placement of reconstructions upon their original foundation as this study and specifically the aspects of integrity suggest, can make an extremely powerful educational and interpretive impact. The decision to reconstruct *in situ*, however, is a decision which has tremendous consequences for both the resource and the cultural landscape. Therefore the decision to reconstruct *in situ* should not be made lightly and should be preceded by archaeological and historical research and must be accompanied by archaeological mitigation, and be executed to the highest caliber to warrant the destruction of archaeological resources.

The aspects of integrity were developed to measure how well standing structures and archaeological sites convey significance. This study shows that these seven ideas are also useful in determining the significance of reconstructed buildings.
Because they account for a wide range of tangible and intangible factors, these aspects are both well-rounded and yet specific enough to show how a reconstructed building succeeds and where it does not. When combined with many of the tenets from the international charters and within the national historic preservation canon, this corpus represents a means to critically view reconstructions within the US. Not every reconstruction addressed in this study is a success. Others do a good job as educational and interpretive venues, are based upon extensive evidence, utilize archaeological fieldwork to gather physical evidence before the decision to reconstruct and to mitigate the archaeological resource prior to reconstruction and are identified as such. Only when this more textured set of questions are asked can we see variability within these buildings. A less textured group, culturally divorced from a site's cultural biography, would fail to account for the range within the reconstructed landscape. As this study suggests, weak reconstructions (Valley Forge cabins, Washington's Birthplace, Miller's Cottage) should not be lumped with the more successful buildings. This proposed assessment assemblage, combining the aspects of integrity with other measures important in the reconstruction literature, serves to seriate and teases apart these differences.

Assessing any reconstruction should begin with an understanding of the evidence used to create the structure and for proposed reconstructions this is crucial as well. For this reason, the history or cultural biography of a site must be known. It is not enough to merely assess a reconstruction within a contemporary vacuum because
then there is no understanding of evidence, research and decisions, and how these inform the completed building.

Likewise, as it can be difficult to distinguish between the best reconstructions and authentic buildings, all reconstructions should be identified as such. Best practice should also include a discussion of the evidence, the decisions involved in the creation of the reconstruction, as well as identifying conjectured elements and the rationale behind all decisions. While identification should occur onsite, detailed discussions of evidence and decision making detract from the ability of the reconstruction to convey association and feeling and impede the capacity of the reconstruction to serve as an interpretive stage. Instead, this story should be in associated literature or on the Internet. Making these details readily available would increase the public's understanding that reconstructions are an interpretation rather than an authentic element of the past.

Reconstructions are, and should be, utilized as stages for active, inclusive and engaging interpretation. Because they are modern buildings, they should not be treated as if they were historic. Visitor access, programs and even maintenance should not confuse these new buildings with something that is of the past and therefore requires more care and more restrictions to maintain. In situ archaeologically based reconstructions should not be used for purposes other than visitor interpretation; this is a meaningless sacrifice for the destroyed archaeological site and is never justified.
As stages or exhibits, rather than mimicking historic structures, reconstructions should be updated when new information or theories warrant changes. These buildings are not portraying authentic elements from their periods of significance and therefore there should be no attempt to maintain the entirety of their history as a record of the past. Instead, they are essentially museum exhibits and like exhibits should only rarely be curated as examples of earlier didactic methods. Instead, reconstructions should be as accurate and truthful as evolving evidence and scholarship permit. This is an expensive endeavor, but it should be thought of as a cost of choosing this method of interpretation.

Finally, the role of the archaeologist should be elevated in the decision of how best to interpret archaeological sites, because as Chapter Three illustrated, reconstruction is not the only means available. Elements of the archaeological site itself should guide the interpretive method, and the archaeologist, as the professional who understands the fragile and nonrenewable resource as well as the nuances of archaeological data, should have an active voice in these decisions. Because an in situ archaeological reconstruction should be based foremost on primary physical evidence, an archaeological investigation should occur to help guide choice of interpretive method. When reconstruction is chosen, the archaeologist must continue to guide the process. Because these reconstructions almost always completely destroy their archaeological foundations and associated features, as well as the entire archaeological record, a complete archaeological
mitigation should occur prior to construction. Only when the archaeologist is completely involved, from the very beginning until the very end, can a decision to reconstruct even begin to justify the damage inflicted upon the archaeological resource.

The best reconstructions combine these 14 tenets in varying degrees, the worst only begin to address these issues. By looking at these 14 items one is able to address what is successful about an *in situ* reconstruction and what is not working. While a site administrator can not address all 14 of these ideas for standing reconstructions, some of them can be corrected. For planned or future reconstruction, these 14 should be followed closely. By working to meet and expand upon these criteria, historic sites will create effective and convincing backdrops to engage the public in discourse about the past.

**Conclusion: An Assessment of the Washington Reconstructions**

The criteria explored in this study to assess *in situ* reconstructions were utilized to measure a number of case studies associated with the life of George Washington. The 14 tenets suggested as the foundation for a useful measure, show variability within the case studies. This seriation illustrates a number of significant details about the reconstructions themselves and by extension about what makes a successful reconstruction.
Table 2 details the rankings of the Washington case studies suggested by this exploration of assessment criteria. Again, a simple "strong / weak" scale is used to gauge these reconstructions, with "y" (YES) connoting a strong feeling and "n" (NO), a weak feeling. "P" (PARTIAL) is an intermediate position and "?" is used in the evolved column because many sites do not have new evidence to change a reconstruction. Not surprisingly, the success of the Mount Vernon reconstructions is testament to their placement within a restored landscape and the overall conservative approach to reconstructions by the MVLA. The Mount Vernon Blacksmiths' Shop has a "p" for evolved as the plan for the building has changed through time with reevaluation of the physical evidence.

One of the most surprising outcomes is in the strength of the Fort Necessity reconstruction. The reconstruction literature and the Secretary of the Interior's Standards for Reconstruction all suggest that reconstructions are most successful when they fill in missing gaps rather than are part of a completely reconstructed landscape. Fort Necessity, this study suggests, illustrates that a site does not have to be part of a restoration master plan to be successful. Likewise, Washington's Gristmill and Distillery also support this idea. The Fort Necessity story shows how archaeological fieldwork is best used within planning and construction of reconstructions. Harrington's (2003) work at the fort was early for historical archaeology but remains a model for archaeological involvement within a larger culture that chooses to reconstruct missing buildings.
<table>
<thead>
<tr>
<th>Location</th>
<th>Design</th>
<th>Setting</th>
<th>Materials</th>
<th>Workmanship</th>
<th>Feeling</th>
<th>Association</th>
<th>Extensive Evidence</th>
<th>Fieldwork Prior to Reconstruction</th>
<th>Mitigation Prior to Construction</th>
<th>Decoration Prior to Reconstruction</th>
<th>Interpretation Utilizes Reconstruction</th>
<th>Identified</th>
<th>Reconstruction Process Shown</th>
<th>Evolved with New Evidence</th>
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<tr>
<td>Fort Necessity</td>
<td>Y</td>
<td>Y</td>
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<td>Dung Repository</td>
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<td>N</td>
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<td>?</td>
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<tr>
<td>Blacksmiths' Shop</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<td>Distillery</td>
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<tr>
<td>Greenhouse / Slave Quarters</td>
<td>P</td>
<td>Y</td>
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<td>Coach House</td>
<td>P</td>
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<td>P</td>
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<td>N</td>
<td>Y</td>
<td>N</td>
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<tr>
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<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
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Table 2. The Proposed Assessment Criteria and the Washington Reconstructions.

Washington's Gristmill complex, while illustrating that a successful reconstruction does not have to be part of a restoration master plan, also shows that the margin between success and failure is quite tenuous. This study found both the Gristmill and Distillery to be strong reconstructions, while the Miller's Cottage suffers from a disregard for its accuracy and interpretation by the MVLA. For a reconstruction to be successful it must be valued as an important part of an interpretive plan and resources must be invested to maintain, utilize and interpret the reconstruction accurately and effectively.
This same phenomenon contributes to the overall failure of the reconstructed cabins at Valley Forge. Today, they have not been transformed into support functions as the Miller's Cottage has, but rather their lack of interpretation or purpose suggests that they are no longer valued by the NPS, and therefore they do not successfully exist as reconstructions upon the landscape.

These 14 criteria, drawn from both international principles and national policies guiding reconstructions, as well as ideas which are used to evaluate the significance of standing structures in the US, combine to form a perceptive gauge that is capable of defining variation and texture, both strong and weak between in situ archaeologically-based reconstructions. This study suggests that these assessment measures seriate the case studies, looking at a variety of factors from their ethical merit, educational potential and the justification of each upon the destruction its construction did to the authentic fabric of its archaeological site. The benefit of a deep and broad set of criteria, evaluating the justification for construction, evidence, decisions and current operation of the buildings within their historic sites, is a lens sharp enough to view the totality of these reconstructions. A less comprehensive assessment group presents results which are not refined enough to detect differences between the sites. Like reconstructions themselves, a successful measure must be complex, multifaceted and intricate in order to tease apart those reconstructions which serve to positively advance the understanding of the past and those that do not.
Chapter Six: Conclusion: Striving for Excellence Within
In Situ Archaeological Reconstructions

Introduction

This study began in an attempt to better understand the nature, function and creation of in situ reconstructions at historic sites. Through this exploration this study attempts to define and clarify what constitutes an effective and justified in situ reconstruction. The goal of this dissertation was therefore to weigh criteria to assess both existing reconstructions and aid in the planning of future ones. By suggesting means to aid in planning and guidance it is hoped that projects will be better conceived before construction and awareness and sensitivity for the fragile archaeological resources might be routinely factored into the process prior to making decisions about the best method to interpret the past. Additionally, understanding how and which criteria are useful measures to guide reconstructions should help construct more effective conveyors of the past, in cases where administrators choose reconstruction as a method of interpretation. By using a grouping of in situ reconstructed sites that were diverse both temporally and typologically yet retained cohesion in geographic range and overall subject matter, a series of concepts were identified that together form a lens to critically view in situ reconstructions.

This study explored a variety of principles including ideas from both international treaties and national policies because no single source provided the breadth and depth by which variation within, and between, in situ reconstructions could be
measured. From the international policies that guide interpretation and cultural resources at heritage sites an emphasis on evidence, sensitivity to authentic fabric, identification and a fluid, evolving final reconstruction were deemed significant.

The Secretary of the Interior’s Standards for Treatment of Historic Sites further reinforced the emphasis on evidence and identification, and provide a level of sensitivity to historic fabric successful in guiding the development of in situ reconstructions. Therefore, the analysis of various criteria makes it clear that plans to reconstruct must be sensitive to historic fabric, and the importance of archaeological evidence before deciding to reconstruct and full mitigation of historic fabric after reconstruction is agreed upon. The proposed assessment factors also expand identification to include on-site recognition that the structure is a reconstruction, as well as discussion of conjecture, decisions and process in some venue, either on-site, Internet, publication, or exhibit.

The seven aspects of integrity, created for the National Register of Historic Places, provide a useful measure for assessing both the cultural landscape in which an in situ reconstruction fits and the overall strength of the completed building. These concepts: location, design, setting, materials, workmanship, feeling and association, address many of the issues raised by the case studies and serve to seriate the reconstructions so that variability can be measured. These criteria are also useful for gauging the completed product whereas the international charters
and the Secretary's standards are more useful in assessing construction and planning procedures.

Finally, one tenet of Criteria Consideration E of the National Register is applicable. Reconstructions should be part of a succinct and utilized interpretive theme so that they can function as a stage for interpretation and mesh seamlessly into their surroundings.

Lessons of the Case Studies to Guide Reconstructions

In developing these 14 ideas that should help administrators and planners assess the nature, function and creation of in situ reconstructions, this work analyzed eleven case studies. A number of conclusions about these sites were apparent and these details form Chapter Five's discussion of all the criteria viewed for the study. This discussion successfully identified a series of principles that identified reconstructions that work well, those that are completely unsuccessful reconstructions and others that were weak but not egregious.

Initial recommendations for these three classes of reconstructions follow. It should be noted that these are preliminary and several aspects need to be studied further before these recommendations can be formulated and finalized. The criteria identified in this study should be further refined and explored at a range of sites to aid in the development and effectiveness of this set of criteria. Additionally, this study did not address how visitors understand and view in situ reconstructions.
reconstructions. Although this topic was not within the purview of this study, it is viewed as an important factor in crafting recommendations about the future of *in situ* reconstructions and should be explored before recommendations can be codified. Besides the case-specific details discussed in this and the previous chapter, this exercise has also drawn a number of general conclusions about *in situ* archaeological reconstructions at heritage sites and these are discussed in this concluding chapter.

*Recommendations for Unsuccessful Reconstructions*

It is recommended that the worst reconstructions within this study should be torn down after thorough documentation. Both Washington's Birthplace and the Valley Forge cabins are not successful and serve to portray completely inaccurate snapshots of 18th-century life. Heritage sites should not be lulled into favoring reconstructions because of their expense or seduced by the permanence of brick and mortar construction. These reconstructions are neither accurate nor authentic and to maintain them upon the landscape and weave interpretation and labels for them is poor stewardship and unethical. Heritage sites, because they are held in such high regard by their visitor, must be maintained in the most accurate manner so as to not consciously convey a misleading or erring image.

Prior to removing reconstructions from the landscape, these entities should be fully documented using the Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation (Secretary of the Interior 2003).
These ensure that the structure is recorded in order to convey significance and character prior to demolition and requires that documentation is archivally sound and clear. Measured drawings, photographs and written documentation are part of the accepted procedure. This documentation should be placed in an archive at the site for future research and planning purposes.

While there is not a strong precedence for dismantling *in situ* reconstructions it has been done. As early as the 1930s, Fiske Kimball advocated dismantling Washington's Birthplace once individuals who were heavily invested in the project died (Bruggeman 2006: 53-54). In the early 1960s Thomas Jefferson's Birthplace, Shadwell, was reconstructed based upon archaeological work conducted by Roland Robbins. This structure was dismantled less than a decade later (Linebaugh 2005, 2004, 1995). More often, inaccurate reconstructions are maintained upon the landscape with no, or only limited, acknowledgement of their shortcomings. To show Washington's Birthplace as a large brick mansion even by acknowledging that it is a "representative memorial mansion" maintains this visually upon the landscape and perpetuates the misleading and inaccurate substantial building at the expense of interpretation which could focus upon the real birth site.

In his conclusions to the recently completed administrative history of the George Washington Birthplace National Memorial, historian Seth Bruggeman (2006: 240) remarked that as currently interpreted with period rooms the memorial mansion
"will continue to draw attention away from the original birth site foundations and will always be mistaken by some as the actual house." He calls for a "physical alteration" or "deshrification," proposing that the building should serve as an additional visitors' center where discussion of the history of the Colonial Revival, the WNMA and women-led preservation organizations, and plantation life would be discussed. While the history of the memorial mansion is more significant than the cabins at Valley Forge, the presence of the imposing structure at Washington's Birthplace is an extremely influential landmark and almost 80 years of interpretation have not succeeded in clearing up the confusion. The most ethical step is to dismantle or move the building away from the immediate area of the authentic birth site.

This study argues that reconstructions are effectively exhibits that function as interpretive stages and as such they should be updated and evolve with new evidence or reinterpretation of data. Only in rare instances should these inaccurate three-dimensional standing structures be used to interpret the history of reconstructions or interpretation. By making inaccurate reconstructions part of the historic scene, administrators are perpetrating a fine-line between truth and fabrication. Reconstructions are not authentic structures and to consciously maintain an inauthentic, inaccurate building because it has achieved a recent authenticity due to its (re)construction is inexcusable. There are better and more appropriate venues to interpret the evolution of site interpretation and one idea is
to move these buildings to an *ex situ* location or document their history on the Internet or publication.

**Recommendations for Less Successful Reconstructions**

Less egregious, but still unsuccessful, reconstructions should be renovated so they are an accurate historical depiction. Again, as interpretive exhibits, to maintain inaccurate buildings is not ethical and undermines the power reconstructions hold to enhance interpretation and education. In this study, Washington's Gristmill should be rebuilt to its historic documented height and the extension to the Miller's Cottage should be removed.

Reconstructions that are being utilized for something other than interpretive space should be returned to their intended function. The Miller's Cottage should be turned into interpretive space focusing on domestic life of the middle-class miller and his family and servants. Mount Vernon's Greenhouse / Slave Quarters should interpret all four rooms as domestic space for the enslaved community, thereby reinforcing that George Washington's Mount Vernon was home to many more African Americans. In both these cases of turning what is currently retail and office space into interpretive venues, the administration would have to find additional non-public interiors that do not impact the historical or archaeological resource, but this should be the price of engaging in and constructing a reconstruction. Failure to utilize a reconstruction for interpretation is a complete waste of the archaeological resource and the fiscal resources that built and
maintain these buildings. These non-interpreted reconstructions fail to live up to the promise of their construction.

Reconstructions should be updated regularly as evidence is reinterpreted or discovered. They should be treated as modern exhibits not historic structures. Museums regularly update exhibits to reflect discoveries or as presentation styles become stale or unfashionable. Reconstructions should be treated in the same manner. Just because they appear as real buildings, and the most successful ones should be mistaken for authentic historic buildings, they are not and they should not be maintained as if they were. Managers at historic sites should not knowingly preserve inaccuracies but should foster their evolution as our understanding of the past increases.

As modern exhibits, reconstructions should provide a venue for engaging and interactive interpretation – a stage for history to occur – not memorials to those in the near past who built them. Reconstructions should enhance existing interpretation and their interpretation should not project an inconsistency into the fabric of the historic site. Additionally, sites should understand the impact interpretive method has on communication and the ramifications of mixing medium. Just as with adaptive reuse, to interpret some sites as an outline or ruin adjacent to an extant structure conveys significant messages about the two sites and the people who lived or worked there.
Every reconstruction utilizes some degree of conjecture, simply because it is impossible to have evidence for every minute decision required in building a new structure. To negate conjecture and representation outright is not rational or practical. Instead, a better standard would be to minimize the use of conjecture and utilize all available forms of evidence to create a reconstruction that is evidentially sound and valid. Reconstructions should be based upon primary, site-specific, evidence first, utilizing physical evidence most heavily; then on documentary and oral evidence and finally on secondary or representational evidence from the correct time period, socio-economic level and region to construct the reconstruction. Elements that must be conjectured should utilize appropriate secondary evidence and if such details are not available the reconstruction should not be attempted.

Evidence then, is important in the creation of a believable reconstruction, but the story of the evidence becomes an impediment in the interpretation of the historical site. For a reconstruction to be the most effective it can be, it should present evidence and the process of reconstruction in a transparent manner. The site should provide details about the process of creating the reconstruction, both what is based upon evidence and what is conjectured, for the interested visitor. This detail does not have to be on-site but could be part of a web page or other publication. This would dispel the notion that the reconstruction is authentic, and reinforce that it is an interpretation of the past. It would also provide an important record of the creation of the reconstruction.
Conclusion

This study was intended to explore *in situ* reconstructions and their nature, function and creation, specifically at historic sites within the US. It addressed these entities from an administrative and professional point of view and explored their success and shortcomings from a vantage point of the heritage professional. This study did not attempt to address this interpretive method from a visitor standpoint. I acknowledge that this facet must be explored and address this in the following section.

The goal of this study was to explore means that could potentially serve to assess *in situ* reconstructions. Understanding how these buildings function and what elements work together to create effective and ethical educational and interpretive venues would serve to better manage existing buildings and plan for future constructions. Through a combination of tenets in a series of international charters, the Secretary Standards for the Treatment of Historic Sites, the National Register's Aspects of Integrity and Criteria Consideration E, a foundation of criteria appears to seriate eleven case studies, pointing out those that are more successful from those that do not achieve a valid interpretation of the past.

Reconstructions are a popular and common interpretive method at historic sites, especially in America. Because heritage sites continue to maintain reconstructions and explore the possibility of creating new *in situ* reconstructions it does not appear that their popularity with heritage professionals is waning. This study
suggests that while three-fifths of the universal principles guiding reconstructions are relevant and extremely successful measures to inform their construction, there are ways in which the international historic preservation community could address the post excavation of archaeological interpretation to focus on better stewardship within the realm of available interpretive methods. This study seeks to provide a means by which proposed and existing reconstructions can be measured to realistically assess when and how it can be ethical and an administrative benefit to reconstruct and when such a radical interpretive method is a severe detriment to the archaeological resource and translates into a negative for the heritage site.

Because of the impermanence of the built environment and especially the landscape associated with enslaved African Americans and other marginal groups worldwide, such as the Iron and Bronze Age people in Western Europe, reconstructions do not have to merely fill in voids in an extant landscape, or be part of a restoration master plan, as specified by the National Register Criteria E. Reconstructions can be valid interpretive exhibits in their own right. In fact, because they are not historic buildings and contain nothing authentic (in a strict sense of the definition), reconstructions should not be thought of as contributing to a historic resource in any manner, except for what they convey about their modern construction period. They are modern venues for interpretation and can be both a powerful and meaningful method to illustrate the presence of these groups who do not have an extant, visible, structural past, especially when these groups are part of a larger story with clearly visible features.
Reconstructions should not be viewed as a *fait accompli* by heritage site managers seeking to increase visitation. Reconstructions are fiscally expensive to create, staff and maintain and the return on them is not guaranteed. But it is almost guaranteed that they will be destructive to the authenticity of the archaeological resource. For this reason the historic fabric must be treated with the utmost sensitivity. Research excavations and thorough historical research should precede decisions or even discussions of reconstruction. Once all evidence is evaluated if reconstructions are decided upon, preservation of the authentic historic fabric and preservation of relationships within the fabric should be the most important factor in planning the reconstruction. When features cannot remain *in situ*, complete archaeological mitigation should occur to ensure that no data is lost.

Archaeologists who follow a career at heritage sites should strive to become decision makers and have a place in the discussion of how best to exhibit and interpret archaeological sites. Miller (2007: 51) stresses that archaeologists "have the most comprehensive understanding of the site, its resources, and its meanings. They must have a central role in the creative development of the exhibit so that the potential of the site as a teaching tool is most fully realized with the available resources." Decisions to reconstruct are sometimes inevitable and in these cases the best course of research and mitigation should be undertaken to protect, record and care for the historic resource. As Noble (2004: 285) suggests, it is then that archaeologists who choose to work in a medium that values reconstruction of their
sites must "make a commitment to practice good science, act ethically, work responsibly with others in the planning, counsel wisely, and take every reasonable measure to make the reconstruction the best it can be."

What we need to remember about reconstructions is that they are a reflection of their past, or of their construction, and merely an interpretation of what they represent. For this reason they are not authentic although they can be an accurate interpretation. They are a mirror of the present and by our acceptance of them, and tacit acknowledgement of them, they can have an impact on the future.

Future Research

While this study provides the context and discourse on both the history and ramifications of in situ reconstructions in the US, and explores international and domestic policies to see how they are utilized by historic sites and governing agencies, it does not attempt a global review of these issues. Future studies should expand this foundation to see how other cultures view interpretative methods and the idea of "sense of place," especially within the realm of reconstructions and the way archaeological sites are interpreted at heritage sites. Additionally, the discussion of authenticity, significance and integrity as cultural constructs should be expanded to better understand how different traditions view these important foundations of the theory behind reconstructions. A better understanding of the variation through space of constructs about place and views on authenticity will
improve and strengthen future international documents which try to guide site interpretation, archaeological resources and heritage sites.

This study worked from a narrow point of view, looking intently on how administrative and heritage professionals view, maintain and create *in situ* reconstructions. It did not attempt to delve into the visitor universe. The limited view of this work could be expanded to include data about how visitor to historic sites think about, utilize and comprehend the reconstructed landscape they encounter. Placing the visitor into the frame of research would create an even more nuanced and textured understanding of the role reconstructions play in the creation of a visible, tangible past. With an expansion into the visitor point of view, a fuller understanding of how reconstructions could be used in more didactic and engaging approaches to interpretation would also emerge. Archaeological research and archaeological sites have always been an important component of creating deeper understandings about the past. The magnetism that archaeology holds for the public could be utilized more effectively in creating challenging and meaningful interpretations by combining the results of this research with an expansion into the public venue.

The criteria for assessing *in situ* reconstructions suggested by this document should also be utilized with a variety of sites throughout the US and in other countries to see if it is applicable on a larger scale. This study focused on a discreet number of sites and small geographic range to explore a means that is felt
to be both a strong measure of variability between reconstructions and applicable
to assess both the creation and function of the entire critical history of a single
reconstruction. When used with the case studies these criteria discovered
variability within the reconstructions and also a hierarchy of effectiveness amongst
the sites not otherwise apparent. Further testing of these assessment criteria would
undoubtedly continue to refine and strengthen them as well as provide additional
insights into the reconstructed past.
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