An Exploration of Learning in a Living History Museum

Family Groups, Costumed Interpreters, their Interactions, and the Making of Meaning

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ABSTRACT

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Family groups are a predominant museum-going demographic; an intact social group, within which members' actions and interactions of museum learning are socially and culturally constructed. Living history museums are the paramount of free-choice learning environments, full of possible avenues for exploration. The typical exhibits often contain little or no explanatory labeling, and a museum visitor's experience with objects and places becomes mediated through costumed interpreters instead of text.

Utilizing a qualitative approach, this research was guided by questions concerning the learning experience of family groups in a living history museum. Specifically of interest were interactions with costumed interpreters, the role of identity and prior knowledge in living history museum learning, and the beliefs of both family groups and costumed interpreters in regard to museum learning. The study took place at a medium-sized outdoor history museum in Central Virginia. Six family groups, seven historical interpreters, and an upper level museum administrator participated. Data collection included observations of family visits, semi-structured interviews before, immediately after, and then 1-2 months after their visit, as well as observations, in-depth interviews, and short reflective chats with the costumed interpreters. Relevant documents were collected including museum information, educational programming materials, and photos taken by visiting children.

Using Erickson's (1986) model of analytic induction, eight assertions were produced to explore the experience in a living history museum. These findings address museum learning on the organizational, interpreter, family, and individual levels. The

organizational intent of the museum to educate the public, and the beliefs that costumed interpreters are educators who must balance education and entertainment as they enact the museum's curriculum, influence the interactions between the interpreters and family members. Family members identify the museum as an opportunity to experience history up close, while individuals establish personal connections to the museum through their prior knowledge, family history, and imaginative play. Individual learning outcomes for the museum visits vary considerably, as the museum's intentions for learning are transformed through the successive interpretations of the costumed interpreters, the family group as a whole, and the prior knowledge and identity of the individual family members.

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APPROVAL OF THE DISSERTATION

This dissertation, "An Exploration of Learning in a Living History Museum", has been approved by the Graduate Faculty of the Curry School of Education in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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DEDICATION

To My Family

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

Historically, museums have had several separate yet related functions that contribute to their underlying mission and vision. Initially, museums functioned to amass collections of artifacts, as a locus of conservation for their collections, to perform research and extend knowledge on the collections, and finally, to exhibit their collections (Alexander, 1996). Education as a significant museum function has been recognized as long as there have been public museums, though the educational mission became more central and critical as "industrialization progressed, populations moved to cities, science and industry reshaped life … and museums were viewed as one type of institution among several that could provide education to the masses" (Hein, 1998, p. 4). Today education is at the core of almost any museum's mission (Roberts, 1997).

Along with the shift towards promoting education in museums, there has been considerable growth in museum visitorship (Falk & Dierking, 2000). Family groups are a predominant museum-going demographic (Hein, 1998) and comprise a natural learning unit. Over the last two decades, for example, demographic studies at the National Museum of Natural History suggest that 66% of visitors attend as part of a family group (Falk & Heimlich, 2009). Coupled with the trend in educational research at large to privilege the sociocultural theory of learning, a family's meaning-making conversations may be a valuable and useful lens through which to view museum learning. In particular,

families are an intact social group, within which members' actions and interactions of museum learning are socially and culturally constructed (Ellenbogen et al., 2004).

Recent research shows that museum learning is personal, contextualized, and takes time (Rennie & Johnston, 2004). Investigating how families, as individuals and as collective wholes, act and interact in shared contexts outside of school or work takes into account the personal and contextual nature of museum learning. Investigating Rennie and Johnston's third idea of learning over time is considerably more difficult, but will be required if we are to truly make sense of what goes on with families and costumed interpreters at outdoor history museums today.

Background

Prior studies have examined how family groups learn in museums and other informal contexts, but very little research has been conducted specifically in the area of history and archaeology museums and heritage sites (Hooper-Greenhill & Moussouri, 2000). While there have been a few recent studies, most notably Rosenthal and Blankman-Hetrick's (2002) research at Conner Prairie on first-person interpretation and family group conversations, not much else is well-documented or explored in the areas of visitor motivation, prior knowledge, and adult or child learning in this type of museum.

Outdoor history museums present several specific research challenges. Firstly, there are physical challenges inherent in a large open-air setting. Unlike indoor, climate-controlled museums, where video or audio taping, covertly or overtly, is common practice, using any type of recording device outdoors can be problematic. Unpredictable weather, complications such as extreme wind noise, and large open spaces make any kind of recording difficult. Even taking field notes, on the go across acres of museum grounds

for the two to four hours a family typically spends at this type of museum, can be a data collection quagmire. Research in this setting, compared to other museums, is physically intensive. Perhaps this is one of the reasons that considerably less research on family groups, and visitors at large, has been undertaken at outdoor history museums.

Beyond the physical challenges, there are also challenges in identifying and determining what people "should" be learning in an outdoor history museum. While on the surface this might seem to be a fairly simple task, it is often not. Most outdoor museums have "post goals," or themes for each costumed interpreter at a particular station (Rosenthal & Blankman-Hetrick, 2002). These themes are often merely guiding ideas, so a visiting family will get some exposure to a variety of aspects of daily life throughout their visit. Once out on the museum grounds, however, families bring their own agendas (Falk, Moussouri, & Coulson, 1998), and that can greatly influence the conversations between a family group and a particular costumed interpreter. In addition, the content, in terms of both depth and breadth, is likely to vary based on visitors' particular interests, interpreters' areas of expertise, time of day, season of the year, and any special event that might be going on that day.

Another challenge to determining what is to be learned from a particular outdoor history museum visit is the type and interpretation of exhibits. While some open-air history museums contain, in part at least, traditional dioramas or glass-encased artifacts with descriptive labels, many exhibits take a different form. The exhibits that typically constitute the majority of living history museum offerings do not necessarily contain explanatory text, and a museum visitor's experience with objects and places becomes mediated through costumed interpreters instead of text. This type of museum education

can be viewed as "…fundamentally a meaning-making activity that involves a constant negotiation between the stories given by a museum and those brought by visitors" (Roberts, 1997, p. 8). An experience that consists largely of interactions with structures, tools, and artifacts, original and reproduction, that are utilized and discussed by interpreters and visitors alike makes for a different style of learning outcome when compared to a science museum exhibit that shows the visualization of sound waves.

Despite the immediate and particular challenges to research in an outdoor history museum, there is also a specific but fairly universal challenge to conducting museum research across all types of institutions. Along with the shift in theory to adopt a more sociocultural view of learning, researchers of informal learning communities and experiences have recently become interested in connecting a particular learning experience to other aspects of a visiting family's particular identity and life experiences. What is learned during a particular visit is still of interest, but how members of a family use, adapt, and expand on what they have learned in their future experiences is of considerably more interest (Rennie & Johnston, 2004).

This longer, broader view is in contrast to the earlier studies which focused on the anatomy of family visits to museums and the predictable patterns of actions that occur due to the influence of social and physical dimensions of the visit (Dierking, 1989; Falk, 1991; Dierking & Falk, 1994). This is due, in part, to the fact that longitudinal studies, even small ones over a period of a few months, are difficult to conduct. This research is, however, absolutely necessary if we want to be able to track and connect learning in outdoor history museums with how family members use their knowledge and experiences throughout other parts of their lives.

Significance

This study is of potential value to the museum educational leadership of outdoor history museums, since it can help them to guide and craft experiences that add more value to family group visits. This work will also help guide the trajectory of professional development for museum educators working in the field. Additionally, the findings could potentially inform the family groups themselves, so they can utilize the museum resources and environment to their fullest educative potential.

This research is also of interest to the community at large, as much of what we know about museum learning comes from the museum's perspective. This is due to the fact that a substantial part of the research done in museums today is exhibit-specific evaluation commissioned by the upper-level administration. While the findings may have some relevance to contexts beyond that of the original investigation, the information has largely to do with a particular exhibit – how people interact with the exhibit and with each other around the exhibit, what the learning outcomes from the exhibit might be, if the interactions with the exhibit achieved the desired goals, and possibly ways to improve the exhibit to provide better visitor experiences. As such, this type of more traditional research, with a narrower focus, may be of limited use to many researchers and practitioners. The broader, longer, multi-angle view this study will provide will likely be of more value to a larger audience.

Research shows that family agendas directly influence what is learned in a museum visit (Falk, Moussouri, & Coulson, 1998) and a deeper understanding of family agendas could contribute to better design of effective museum programming and use as a learning environment and resource for families (Ellenbogen, 2002). There is also a lack

of research on the mediating strategies family groups make use of while visiting most types of museums, but especially outdoor history museums. A more rich understanding of the way families scaffold their investigations and conversations could be valuable. Insights into these learning strategies could help costumed interpreters and museum educators work with other families.

Research Questions

The main research goal driving this study is to contribute to the existing literature on family groups and their meaning-making interactions in a museum environment. In particular, this work addresses the gaps in the literature where very little is known about visitor experiences in outdoor history museums.

1. What is the learning experience of family groups interacting with historic interpreters in a living history museum?
2. How does an individual's prior knowledge and identity influence living history museum learning?
3. What are the family groups' beliefs about learning in a museum? What does learning mean to them?
4. What are the interpreters' beliefs about learning in a museum? What does learning mean to them?

Definition of Key Terms

Family Group

For the purposes of this research, the term *family group* refers to a collection of two to five related individuals visiting a museum together. The groups contain, at a minimum, one parent and one child between the ages of seven and eighteen.

Costumed Interpretation

A *costumed interpreter* or an *historic interpreter* is a museum educator who wears period clothing and generally performs historic activities and demonstrations. He may be working as a *first-person interpreter*, in which case the museum interpreter becomes a historical character (Roth, 1998). Also known as role-playing or character interpretation, the character can be modeled after an actual person, or a composite of several people known to have lived during the time period shown. The interpreter refers to past events in the present tense and tries to avoid breaking character. He is playing a role, whether interacting with museum visitors or other interpreters, or going about his daily life. While at work, he lives as though he were truly a resident of the time and place represented by the museum's buildings, artifacts, and gardens.

Alternatively, an educator may work as a *third-person interpreter.* In third-person interpretation, the interpreters still tend to dress in period clothes, although this is not required, and perform historic activities. The key difference, when compared with first-person interpretation, is that third-person interpreters interact with museum visitors using a contemporary point of view (Rentzhog, 2007). Third-person interpreters make use of modern analogies, speak in familiar language, and are more open and accessible to the majority of individuals they encounter. This style of interpretation is considered easier to provide and is also the most commonly presented at living history museums (Roth, 1998).

A final possibility is that an educator might be participating in a *museum theatre* performance. These types of presentations vary greatly, and can take the form of monologues or ensemble scenes based on historic events (Bridal, 2004). Programs might be geared towards a specific group of visitors such as school groups, family groups, or

possibly just casual individual attendees. In many ways, museum theatre is the middle ground between first and third person models. Interpreters play characters, so the more immersive museum context is present. However, since interpreters are clearly performing, as evidenced by their presence on a stage, or their introduction by another museum staff member, visitors are at ease and familiar with the performance paradigm. Museum theatre is time and staff intensive to produce, and is probably the least common form of interpretation at living history museums in the United States (Bridal, 2004).

Free-Choice Learning Environments

A *free-choice learning environment* is any environment where learning is self-motivated and self-controlled, and driven by an individual's natural and intrinsic curiosity. While some researchers dub these experiences either informal or non-formal (Merriam, Caffarella, & Baumgartner, 2007), the term free-choice learning encompasses an even greater set of activities. Additionally, it acknowledges that formal learning can still be "free-choice," depending on which ideas, activities and experiences captivate and motivate a particular person. Falk and Dierking (2000) coined the term in reference to, in particular, visits to aquaria, museums, zoos and botanical gardens. Researchers also use this term to refer to everyday experiences that extend beyond these visits, including time spent learning at home or on the weekends. Activities such as reading books, magazines and websites, watching movies, or engaging in any other freely chosen learning endeavors all constitute the pieces of the free-choice learning puzzle. Any environment where a person can engage in these activities is a free-choice learning environment.

Public and Private References

I use these terms in the following research to distinguish the types of references family members make while exploring an outdoor history museum together. For the purposes of this research, a *private* reference would be one that was local and particular to the family in question. A mention of how a particular architectural detail is similar to the one on Uncle John's house would be an example. A *public* reference would be one that is outside of the family's culture, and more universally understood. A connection between a spinning wheel and the Sleeping Beauty fairy tale is a very common public reference among families visiting outdoor history museums (Craig, 2008).

Summary

The Association for Living History, Farm and Agricultural Museums (ALHFAM) lists 220 member institutions in North America (J. Sheridan, personal communication, November 9, 2011). In addition, hundreds of other institutions that are categorically similar to ALHFAM institutions but choose to belong to only one organization claim membership in either the National Association for Interpretation (NAI) or the American Association for State and Local History (AASLH). Outdoor history museums remain popular beyond this continent as well, particularly in Europe and Australia. Despite the large number of institutions that offer interpretive folk life programming, there has been very little research conducted in this type of museum within the last thirty years (for an excellent but dated review see Bunch, 1978). In order to inform current practice for museum interpreters and education staff, provide strategies for visiting families, and contribute to the ongoing conversation on family learning in museums, a multi-perspective investigation is warranted. This research endeavor was guided by the following questions:

1. What is the learning experience of family groups interacting with historic interpreters in a living history museum?
2. How does an individual's prior knowledge and identity influence living history museum learning?
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4. What are the interpreters' beliefs about learning in a museum? What does learning mean to them?

CHAPTER 2

REVIEW OF THE LITERATURE

Overview

The goal of this literature review is to pull together a research framework from the fields of education, museum studies, psychology, and visitor studies. In doing so, I will present a sketch of the history that shaped the research questions, and highlight the critical findings that will inform this investigation of family meaning-making in living history museums. I will also note the areas in which research is lacking and further study is warranted.

First, to ground my research in an historical context, I will briefly explore the evolution of museums as educational institutions. This is followed by an examination of a variety of learning theories, including how these theories are realized in a museum environment, and how they have shaped the history and practice of visitor learning research to date. I continue with an overview of living history museums, which touches on history, core programmatic elements seen across museums, types of exhibits, and discussion of interpretation models. The last section is devoted to a review of the research on the key constructs of family as learners in museums, visitor motivation and agendas, prior knowledge, family identity, and costumed interpreters' beliefs and practices. Woven together, these threads create the backdrop for the research questions surrounding the learning embedded in the interactions between families and costumed interpreters in a living history museum.

Museums as Educational Institutions

The origin of the museum as an institution can be traced back to around 290 B.C. when Ptolemy established a center at Alexandria in service of the Muses (Alexander, 1996). The modern day model of the museum for public access and education, however, traces its founding to a much more recent time. Several prominent museums were founded and populated with objects and exhibits that were part of a world's fair (Rydell, 2006). The first was the Victoria and Albert Museum in London. It was established with the transfer of items from the collections on display at the Crystal Palace Exhibition in 1851, the first world's fair. Similarly, the Paris Exposition of 1878 featured replicas of exotic villages populated by native peoples imported for the event. This inspired Artur Hazelius in his efforts to preserve the traditions of rural Sweden in what would become the first open-air history museum. He went on to collect buildings from all over the country and reconstructed them at Skansen in Stockholm (Malcolm-Davies, 2004).

Likewise, in the United States (US), George Brown Goode believed museums should be avenues for disseminating knowledge and culture (and therefore power), to the masses. He suggested museums could be more accessible to the common man than the ivory towers of the university, rather like the public library or the world's fairs (Rydell, 2006). Based on this principle, Goode and Spencer Fullerton Baird planned the transformation of the Smithsonian from a "research only" institute to America's National Museum, a vast exhibition space that freely welcomed the public. They were able to accomplish this by transferring more than 40 railroad cars' worth of exhibits and artifacts from over 30 different countries at the end of the 1876 Centennial World's Fair in Philadelphia, Pennsylvania (Conn, 1998). A third example of this trend was the creation

of Chicago's Museum of Science and Industry following the 1933-1934 "Century of Progress" World's Fair.

In the early 1900s, many new museums were emerging across the US, and their collections were open to the public for all to come investigate, explore, and learn (Conn, 1998). While during the latter half of the 19th century it was believed people could learn simply by viewing a naturalistic collection of objects, it was becoming increasingly apparent that something else needed to be added to the museum experience to make it a true democratization of education. Goode argued that a well-described collection, with instructive labels and well-selected specimens as illustrations, was the best way to bring science knowledge to the public (Alexander, 1996). While this static, written interpretation worked well in a natural history museum, Benjamin Ives Gilman of the Boston Museum of Fine Arts argued that works of art, being largely aesthetic in nature, spoke to visitors directly and needed little formal labeling. Gilman believed the audience would benefit instead from commentary from a well-trained scholar. In 1907, he hired the first museum docent in yet another move to solidify the museum as an educational venue (Alexander, 1996).

While education as a significant museum function has been recognized as long as there have been public museums, the educational mission became more central and critical in the beginning of the 20th century as "industrialization progressed, populations moved to cities, science and industry reshaped life … and museums were viewed as one type of institution among several that could provide education to the masses" (Hein, 1998, p. 4). This trend continued into the 1930s, when tours, demonstrations, lectures with lantern slides, and labels began to appear in most museums.

During this time, two very influential museum researchers undertook large-scale investigations of the current state of museums. Grace Fisher Ramsey conducted a comprehensive survey of the educational work of museums. This review, dating back to the popular founding of museums in the 1870s, included the methods used in education as well as the trends that were followed. Declaring the pioneer period of museum education to be completed, she advocated for a future with stronger museum-school and museum-community connections as another way to provide mass education (Ramsey, 1938). In particular, Ramsey called for increased training opportunities for both student and in-service teachers. She also suggested museum teaching might be particularly suited to meet the needs of specially gifted as well as disabled children. Finally, she identified that the most important factor in the quality of educational work of a museum was the ability of the instructor to "present an interpretation of this concrete material at the pupil's level of development so he can project his experience into the situation until it becomes real to him. Then meaningful generalizations may emerge" (Ramsey, 1938, p. 254).

While Ramsey's work focused primarily on museum education, Laurence Vail Coleman was known for his comprehensive reviews of more general museum practices and operations. He addressed everything from financial administration to restoration and preservation as well as promoting visitation in his book "Historic House Museums" (1933). His subsequent three-volume review, "The Museum in America" (1939), was a similarly wide-ranging examination of all aspects of museum work for a multitude of different types of museums. He continued to publish directories and guides for museum

operations over the next twenty years, giving the next generation of museum researchers and practitioners a solid base of literature on which to build.

By the 1940s, education of schoolchildren became another significant element for many museums, as they strengthened their education departments by partnering with local school districts (Hein, 2006). Programs aimed at school groups as well as public outreach, branch museums in libraries, and loaning of materials to school districts reflected the broadening scope and influence of museum education (Alexander, 1996).

Museums continued to appear at an astonishing rate in the years following the Second World War. Innovative approaches to museum education during this time included film and audio integration into exhibits (Hein, 1998). In keeping with other developments of the times, there was a move to add more interactivity to the museum experience, with hands-on science exhibits appearing at the Exploratorium in San Francisco in the late 1960s (Bechtel & Ts'erts'man, 2002).

The federal funding of the education system in 1965 under the auspices of the Elementary and Secondary Education Acts established a mandate to evaluate. These funding contingencies gave rise to the new sister field of museum education: evaluation (Hein, 1999). Museum evaluation can be generally divided into two types: formative and summative (Scriven, 1967). Bob Stake uses a cooking metaphor to elucidate the difference between the two types of evaluation: “When the cook tastes the soup, that’s formative; When the guests taste the soup, that’s summative” (quoted in Scriven, 1991, p.169). In both cases, however, the mandate to evaluate was viewed as an opportunity to evaluate a particular exhibit, or possibly several exhibits, within a single museum. In most situations, evaluation was seen as a tool to improve a museum’s own exhibits,

and not necessarily as a means to understand or improve visitor learning, other than improvement in visitor learning as a side effect of the natural exhibit development process.

Historically, the visiting public, as well as the museum staff and administration, have acknowledged the museum's educational goals (Hooper-Greenhill, 2000), however there has been much disagreement on the specifics of who should be learning what during a particular museum visit (Falk & Dierking, 2000). After decades of sporadic and haphazard forays into visitor learning research, the American Association of Museums' (AAM) 1984 publication of *Museums for a New Century* called for the establishment of a systematic, large-scale education research agenda. This publication helped shape and spur a shift in the theoretical perspectives, and towards the end of the 1980s, researchers began to focus more on exploring a visitor's "experience" in a museum and less on the effect of a particular museum exhibit on a particular visitor (McManus, 1988).

As the field of museum learning research was beginning to develop a more unified, cohesive approach to studying and describing the visitor experience, another highly influential AAM report was published on work undertaken between 1989 and 1992. *Excellence and Equity: Education and the Public Dimension of Museums* (Hirzy, 1992) challenged museums to intensify their educational missions and visions, asserting that "the commitment to education as central to museum's public service must be clearly expressed in every museum's mission and pivotal to every museum's activities" (p. 5). Going even further in the role of public service, museums, in their educational guise, should position themselves as agents of social change, and advocates of social responsibility (Hirzy, 1992; Hein, 2006).

While Hirzy's report offers 10 principles as guidelines towards implementation, it also acknowledges the enormous magnitude of the challenge and the considerable need for time, resources, and commitment to meet it. Change can be slow in coming, but according to one estimate, at least, education staff might comprise as much as 50% of the employees at a large museum (Hein, 2006). Due to the current trends in economic policies, museum education departments are uniquely positioned to fill in the gaps as public schools lose funding for aesthetic education or need expertise in science in the era of high-stakes testing. Conversely, the recession of 2008, combined with severe state and federal budget deficits, translates into reduced funding for museums as well. Education departments are essential to the contemporary museum experience. They must balance economic constraints with the need to serve an increasingly diverse group of visitors. In addition, to make the most use of existing resources, it is critical for museums to assess what the actual learning experience is like for the visitors, contrast this with what the museum intends for the visitors to experience, and make changes accordingly.

Theories of Learning

There are a great many theories of learning, and several theories have had substantial influence in the design and development of learning environments. Each learning theory broadly addresses an epistemology, or theory of what knowledge is. Epistemologies range from the objectivist to constructivist. The objectivist stance casts knowledge as a set of unbiased truths, separate from any particular person, which can and must be acquired to learn. On the other end of the epistemology spectrum, the constructivist stance holds that knowledge is constructed by the learner, either personally or socially. What follows is a brief summary of some of the key theories,

including behaviorism, cognitivism, social cognitive theory, and several varieties of constructivism. In addition to an overview of each theory, I also provide examples of how each theory is realized in museums and how each theory has shaped research on visitor learning across the decades.

Behaviorism

The psychological theory of behaviorism comes in several different flavors, including methodological behaviorism (Watson, 1930), classical conditioning (Pavlov, 1927), and radical behaviorism (Skinner, 1953). While individual theories address particular variations, in general, behavioral learning was thought to be a conditioned response to a particular stimulus, and could be explained as an observable change in behavior, without regard to any internal (i.e. invisible) workings of the mind. Edward Thorndike popularized this notion in education under the term "connectionism" in the 1920s (Lagemann, 2000).

Application in Museum Education

In terms of museum education, behaviorism is realized as the transmission approach to communication theory. Communication is seen as "a process of imparting information and sending messages, transmitting ideas across space from a knowledgeable information source to a passive receiver" (Hooper-Greenhill, 1999, p. 16). This is a one-way model where the museum occupies the locus of power.

The first systematic foray into visitor studies under the transmission model of communication theory took place between 1928 and 1936 (Hooper-Greenhill, 2006). Psychologists Edward Robinson and Arthur Melton at Yale University, with funding from the American Association of Museums (AAM), created and implemented a system

for tracking museum visitors and their movement through an exhibit. Their driving goal was to understand the impact of the physical design of a museum on visitor behavior (Bechtel & Ts'erts'man, 2002). The findings from their new research methodology led Robinson and Melton to advance the ideas of "attracting power" and "holding power." The former idea speaks to the extent an exhibit draws in a visitor, while the latter idea speaks to the extent an exhibit holds the visitor's attention. A visitor's interest in a particular exhibit, as measured by the time spent gazing at elements in the exhibit, thus became one of the first behavioral proxies of museum learning (Munley, 1985).

Harris Shettel and Chandler Screven were both prominent leaders in the nascent visitor studies community in the 1960s and 1970s. Working independently, they each pursued a behavioral learning agenda in assessing the impacts of exposure to museum exhibits on cognitive, and to some extent affective, knowledge (Bechtel & Ts'erts'man, 2002). A handful of other studies relying solely on the transmission model have been conducted more recently (Hein, 1998), but research advances in learning theory have led to a much wider variety of approaches to understanding and assessing museum learning. Behaviorism still has major influence on formal and informal educational practice, though it has largely fallen out of favor in educational research and in the design of new learning environments (Bransford, Brown, & Cocking, 2000).

Cognitivism

The cognitivist approach, alternately known as information processing theory (Norman, 1977), also views knowledge as objective, but holds that learning occurs through active engagement. This theory became popular in the 1970s, when psychologists hypothesized that the mechanism for human cognition was similar to the

pinnacle of technology at the time, the computer. In this view, learning is inexorably tied to prior knowledge and previous conceptions. The act of learning must include opportunities for feedback, allowing people to build onto and reorganize their mental models and representations. Knowledge, which is stored in long-term memory, is further categorized as either declarative (facts) or procedural (a procedure for using those facts). All information, however, must be processed by a person's comparatively limited working memory before it can make its way into long-term memory. This bottleneck, first identified by Miller (1956), is a key component of theories like cognitive load theory (Sweller, van Merrienboer, & Paas, 1998), and requires information to be presented in small, logical, and organized chunks so as not to overwhelm the capacity of working memory.

Application in Museum Education

In the museum setting, this realm of theory is most prominently represented in the design of exhibits and the label text that accompanies them. Research in this vein has focused generally on minimizing perceived cognitive effort, provoking cognitive interest, and minimizing distracting factors. Bitgood and Patterson (1993) found that more visitors would read an exhibit label, for instance, if it were broken down into three smaller chunks than when the same information was presented in one large block. Screven (1992) identified many variables that would increase visitors' willingness to read labels initially, as well as principles for semantic and syntactic complexity of educational message communication. Several other museum researchers (e.g. Koran, Koran & Foster, 1990; Rand, 1990 as cited in Bechtel & Ts'erts'man, 2002) have pursued a variety of aspects of

a cognitivist agenda, and many principles of information processing continue to influence design today.

Social Cognitive Theory

Albert Bandura's Social Learning theory (1977) encompasses aspects of behavioral, cognitive and socio-cultural learning frameworks. Alternatively known as social cognitive theory, learning is conceptualized as the reciprocal interactions between behavioral, cognitive, and environmental influences. This process is represented by the sequence of attention, retention, motor reproduction, and motivation. Attention is influenced by both the event being modeled as well as the individual cognitive capabilities of the particular learner. Retention also speaks to an individual's cognitive abilities, while motor reproduction includes an individual's physical capabilities. Finally, motivation addresses underlying reasons for an individual to imitate another person's behavior.

Bandura opposed behaviorism's unidirectional model wherein a person's environment caused her particular behaviors. He also did not believe that a person's inner mental processes were solely responsible for the way in which she behaved; a person's actions were not seen as completely separate from her environment. Instead, he believed in a combination of factors known as "reciprocal determinism," where behavior and environment mutually influence and cause one another. Behaviors are determined by a person's environment, while a person's environment is simultaneously determined by the way in which she behaves.

Application in Museum Education

Social cognitive learning theory is realized in a museum setting largely through what museum researchers term "modeling." Koran, Koran, Dierking, and Foster (1988) showed that museum visitors observe each other, other groups of visitors, and museum staff to discern and implement strategies for learning and interacting in a particular exhibit. This occurs both on a school trip (within a peer group) as well as among family members (Dierking & Falk, 1994; Falk & Dierking, 2000; Craig, 2008).

Constructivism

Individual

According to Piaget's theory of equilibration (Piaget & Inhelder, 1972), knowledge is individually constructed when developmentally ready. Children live in a state of equilibrium, but when a new event or problematic experience occurs, they are thrown into a state of disequilibrium. Through the twin processes of assimilation, where the child incorporates new information into her existing cognitive structures, and accommodation, where the child adjusts her mental model to incorporate new information, equilibrium is achieved once again. In this way the child continually vacillates between equilibrium and disequilibrium, accommodating and adapting with each new experience to gain new knowledge. This is both a social and an individual process, and is why, according to Piaget, children learn at different paces. Learning is a result of working through these problematic experiences. In other words, developmental maturity leads to learning.

Social

While Piaget believes that a learner must reach a certain stage of maturation before she is ready to accomplish particular tasks, Vygotsky holds that social learning is what leads to a child's development, and therefore knowledge is socially constructed (Vygotsky, 1978; Lave, 1988; Lave & Wenger, 1992). According to Vygotsky (1978), learning leads to development whereby a child learns through social interactions with her environment and her culture, and this, in turn, leads to her individual development. This theory is the basis for the concept of the zone of proximal development, or ZPD. The ZPD is defined as "…the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers" (Vygotsky, 1978, pp. 85-86). In a strict Vygotskian sense, experts provide scaffolds in the form of intense interactive teaching based on continual feedback from the learner. According to Brown et al. (1993), however, "a zone of proximal development can include people, adults and children with various degrees of expertise, but it can also include artifacts such as books, videos, wall displays, scientific equipment, and a computer environment…" (p. 191).

Vygotsky (1978) also writes, "in play a child always behaves beyond his average age, above his daily behavior; in play it is as though he were a head taller than himself" (p. 102). Many visitors come to museums with an implicit agenda of entertainment (Falk, Moussouri, & Coulson, 1998; Malcolm-Davies, 2004), and therefore see museums as a place to engage in exploration and play. Even children who seem to be engaged but do

not participate during the museum visit may later act out in play, at home, some of the things they learned earlier in the day (Craig, 2008).

Apprenticeship

Learning through an apprentice model falls under the larger umbrella of theories that hold knowledge as socially constructed. Specifically, according to Lave and Wenger (1992), learning is a process that happens through legitimate peripheral participation in a community of practice. A community of practice consists of people who are connected through common interest, goal, craft, or professional endeavor. Some members are more central to the community of practice – they have been doing whatever the work of the community is for a longer period of time, or they are more knowledgeable about and have more experience with the concepts, ideas, and practices. New members come to the community through intentional choice (or occasionally happenstance) and take a place at the periphery. By participating from the outskirts of the community, new members become drawn towards the center as they learn and apprentice through participation in the community's work. Gradually, through shared experience and work, new members become more central to the community, and take on greater roles and responsibilities within the group. The members and the community itself continue to evolve as people work and learn together, creating situated knowledge. This is a significant process, as Lave (1988) argues "knowledge-in-practice, constituted in the settings of practice, is the locus of the most powerful knowledgeability of people in the lived-in world" (p. 14).

Taking the idea slightly further, Rogoff (1995) describes a more nuanced view of legitimate peripheral participation in a community of practice. Her theory of sociocultural activity is divided into three distinct planes of action: apprenticeship, guided

participation, and participatory appropriation. Apprenticeship is the community level of activity, a broad look at the entire system of a community of practice, as "… apprenticeship as a concept goes far beyond expert-novice dyads; it focuses on a system of interpersonal involvements and arrangements in which people engage in culturally organized activity in which apprentices become more responsible participants" (Rogoff, 1995, p. 143). Rogoff uses the term "guided participation" to describe an individual's interpersonal interactions within such a community, and "participatory appropriation" to describe the individual's transformational trajectory within the community.

The apprenticeship model can be applied to a community of museum staff, particularly the costumed interpreters. Newer hires learn the inner workings of teaching with objects and interacting with visitors through apprenticeship with seasoned veterans.

Application in Museum Education

In museum education, constructivism is realized as the cultural theory of communication. This is much broader in scope than the transmission model, conceptualizing communication as a "society-wide series of processes and symbols through which reality is produced, maintained, repaired and transformed" in which communication itself is "a process of sharing, participation and association" (Hooper-Greenhill, 1999, p. 16). The broad umbrella of formal constructivist learning theory also supports the current popular museum-specific approaches to research on visitor learning, including the wholesale application of constructivism from other educational research (Hein, 1998; Roschelle, 1995), the contextual model of museum learning (Falk &

Dierking, 1992, 2000), and the sociocultural, or conversational model (Leinhardt & Crowley, 1998; Leinhardt, Crowley, & Knutson, 2002).

The tenets of constructivism (in its many forms), as appropriated from other educational research, are described in detail in the previous section. In the contextual model (Falk & Dierking, 1992, 2000), learning occurs at the intersection of an individual's personal, sociocultural and physical contexts throughout time. It is through exploration of the activities and interactions within all three of these contexts, simultaneously, that a researcher can begin to paint a picture of how people learn in museums. In the conversational model (Leinhardt & Crowley, 1998; Leinhardt, Crowley, & Knutson, 2002), learning is defined as conversational elaboration; it is the sum of the constructs of identity, explanatory engagement, and the learning environment. Museum visitors demonstrate learning through the conversations they have before, during and after a museum visit. In particular, subsequent visitor conversations "…should expand upon the particular elements about which they conversed (i.e., they would refer to more items); would include greater detail, in an analytic sense, about their observations and experiences; would connect or synthesize one element more extensively to other elements both in and outside the exhibit; and would increase the level of explanation of phenomena that they share amongst themselves" (Leinhardt & Crowley, 1998, p. 6).

Regardless of how constructivist theory is realized, learning is no longer considered exclusively the purview of the cognitive domain, or the individual museum visitor, as is the case in the transmission model. Changes in the affective, the aesthetic, and the social domains are also considered when assessing what a person learned during a museum visit. Additionally, researchers are beginning to consider and define measures of

learning for a group rather than for an individual (Stein et al., 2006). The shift in theoretical perspectives, from transmission theory to cultural theory of communication in museum learning research, mirrors the broader shift towards constructivist lenses in formal educational research (Lagemann, 2000).

Living History Museums: A Brief History

According to Anderson (1984), living history is the simulation of life, from many different segments of society, in another time, for the purposes of research, interpretation, or play. As the definition is so broad, it is of little surprise that living history museums, also called outdoor history museums in the US, and open-air history museums in Europe, come in all shapes and sizes. While several living history museums were already established in Europe at the turn of the Twentieth century, the US lagged considerably behind. The first outdoor history museums in America were founded decades later, established and championed by John D. Rockefeller (Colonial Williamsburg) and Henry Ford (Greenfield Village) in the late 1920s (Institute for Learning Innovation, 2009; Alexander, 1996). Some museums, like Colonial Williamsburg, tell the story of particular historical figures or events. Others, such as Greenfield Village, cover more ground, addressing broader themes in the realms of technology, immigration, agriculture, religion, or even day-to-day life during a particularly significant era (Rentzhog, 2007).

While there is great variety in what each museum shows and during what time period, there are three core programmatic elements that all living history museums have in common. The first is an orientation plan, or some way of communicating to the visitors what there is to see and do, and how they can find it all. The second is historic buildings (sometimes restored, sometimes relocated, and sometimes replicated) furnished with

historic (often reproduction) furniture, tools, and artifacts. The third common element is the costumed interpretation and demonstration given by museum staff and volunteers.

Orientation

In novel environments like outdoor history museums, initial orientation has a significant impact on the visit. It affects what visitors expect to see, where they will go within the museum, and what kind of learning experience they will have (Bitgood, 1994). If the museum's interpreters use the first person style, a well-conceived orientation program is an absolute necessity. The visitors need to be acquainted with and prepared for the role-playing they will encounter. If not, visitor experiences can be awkward and uncomfortable upon first meeting an interpreter (Roth, 1998), which can set a negative tone for the rest of the visit.

Orientation strategies are varied, and can include the traditional, text-based pamphlets, signposts, and hand held maps. Other more technological strategies include podcasts, audiovisual slideshows, movies screened in the visitor center, and handheld web applications. A few museums even feature a separate "warm up" exhibit area where visitors can have a live preview of what awaits them once they enter the grounds. Whatever the particular strategy, the goal is to familiarize the visitors with both the physical and conceptual layouts of the museum. This should, in turn, reduce the novelty of the environment so as to better facilitate learning (Kubota & Olstad, 1991).

Buildings and Grounds

Conservation and preservation are some of the key functions of almost any type of museum (Alexander, 1996). The mission of open-air history museums, originating with Skansen in Sweden in 1891, addresses preservation on both the micro level (tools,

objects, artifacts) typically seen in natural history museums, as well as the macro level (houses, tradesmen's shops). Some living history museums recreate a particular time and place in history. In the case of Virginia's Colonial Williamsburg, the museum represents the colonial capitol in the weeks leading up to the Revolutionary War. On the other end of the spectrum, museums such as Greenfield Village in Michigan showcase over 300 years of history from all across the US in a single park-like setting (Rentzhog, 2007).

Restored examples of regional architecture and period furniture are just the beginning at most living history museums. Domestic residences are merely one type of building open to the public for exploration. One-room schools, houses of worship, stores, saloons, forges, and smiths' shops are also popular choices. Since much of the people's history of the US is that of an agricultural society, kitchen gardens, livestock, orchards, and fields of crops are also common fixtures. In museums near bodies of water, paddleboats, tall ships, and, in the case of Mystic Seaport in Connecticut, an entire harbor can also be part of the collection on display. It is not uncommon to find and even ride historical forms of transportation such as locomotives, covered wagons pulled by teams of horses, or even early automobiles.

The layout and precise make-up of the structures and furnishings in the various living history museums in the US vary significantly. The use of pamphlets, signage and labels differs across institutions, depending on, among other factors, if tours are guided by staff or are self-guided, and what kind of interpretation is given at each stop along the way. One idea that remains the same among them all, however, is that hands-on participation is actively sought and encouraged. These interactions are largely facilitated by costumed interpreters.

Interpretation and Demonstration

There are three major styles of interpretation utilized by most living history museums: first-person interpretation, third-person interpretation, and museum theatre. Some museums employ different styles throughout the grounds, such as Conner Prairie in Indiana (Rosenthal & Blankman-Hetrick, 2002), while others stick to a primary mode of interpretation, such as the Frontier Culture Museum of Virginia (Craig, 2008). The goal of all three forms of interpretation is to engage and inform museum visitors, "translating material culture and human or natural phenomena, to the public…. in meaningful, provocative and interesting ways" (Roth, 1998, p. 10). Despite a common goal, each particular style has its strengths and its drawbacks, which I will address in further detail below.

First-Person

In first-person interpretation, the museum interpreter becomes a historical character. Also known as role-playing or character interpretation, the character can be modeled after an actual person, or a composite of several people known to have lived during the time period shown. The interpreter refers to past events in the present tense and tries to avoid breaking character. He is playing a role, whether interacting with museum visitors or other interpreters, or going about his daily life. While at work, he lives as though he were truly a resident of the time and place represented by the museum's buildings, artifacts, and gardens. A major advantage of first-person interpretation is a more authentic, immersive experience for the museum visitor. In particular, people who enjoy role-playing and pretend play find this form of interpretation exciting and captivating.

As to the disadvantages, first-person interpretation tends to exclude women and minorities from playing major roles. This is due to their historical place in society, and gender or race-blind casting is rarely employed at living history museums (Roth, 1998). In addition to restricting who can play roles, the skill set required is vast. It takes considerable knowledge of acting techniques, with a particular emphasis on improvisation, as well as good communication and teaching skills (Roth, 1998). It also takes an extremely broad and nuanced understanding of history, both the particulars of the material to be interpreted and the generals of the time and place the museum represents.

Some visitors take particular pleasure in trying to "trip up" interpreters in character, using modern terms or asking questions the character would have no way to answer. The interpretive experience for other museum visitors is then compromised, as the opportunity for learning and engagement is decreased by an immature taunt. In addition, a bad performance rings particularly false and inauthentic, and can be very unappealing to visitors. Finally, some interpreters who do not know the answer to a particular question have been found to make one up (Handler & Gable, 1997). Even when done well, museumgoers, particularly younger children, can find it somewhat off-putting and are hesitant to ask questions or initiate an interaction with first-person interpreters.

Third-Person

In third-person interpretation, the interpreters still tend to dress in period clothes, although this isn't required, and perform historic activities. The key difference, when compared with first-person interpretation, is that third-person interpreters interact with museum visitors using a contemporary point of view (Rentzhog, 2007). Third-person

interpreters make use of modern analogies, speak in familiar language, and are more open and accessible to the majority of individuals they encounter. This style of interpretation is considered easier to provide and is also the most commonly presented at living history museums (Roth, 1998). There is still a considerable amount of requisite knowledge, as third-person interpreters must possess a thorough understanding of the history they are telling, as well as be proficient in the crafts or skills they are demonstrating. However, since no role-playing or acting is involved, a greater number of people are probably suited to the task. Third-person interpretation is also easier on the majority of museum visitors, as it lowers the barrier to question asking and discussion, since the interpreters and the visitors exist in a similar cultural context.

In terms of disadvantages, third-person interpretation sacrifices some of the immersive experience a visitor might otherwise have in an outdoor history museum. Ironically, when interpreters are more approachable, and when the way they share their message is easily, superficially understood, visitors might not remember or learn as much from their experiences. Third-person interpretation, even when done adequately, can often disintegrate into an extended telling session. Like the Chinese proverb “tell me and I'll forget; show me and I may remember; involve me and I'll understand,” this approach may lack the power to captivate or even engage visitors. A technically accurate and informative interpretation could be as unappealing as poorly implemented first-person interpretation and possibly unmemorable as well.

Museum Theatre

Museum theatre is the most loosely defined style of interpretation. These types of presentations vary greatly, and can take the form of monologues or ensemble scenes

based on historic events. Programs might be geared towards a specific group of visitors such as school groups, family groups, or possibly just casual individual attendees. In many ways, museum theatre is the middle ground between first and third person models. Interpreters play characters, so the more immersive museum context is present. However, since interpreters are clearly performing, as evidenced by their presence on a stage or their introduction by another museum staff member, visitors are at ease and familiar with the performance paradigm.

A strength of museum theatre is that it can broach difficult or controversial subjects from a variety of perspectives (Bridal, 2004). Each character in a given vignette can represent a differing point of view, inviting the museum visitor to consider issues from multiple perspectives, including ones that may be dissimilar to her own. The drawback of this style is that it tends to limit interactivity and affords fewer hands-on opportunities when compared with the other two interpretation modes. Museum theatre is also time- and staff-intensive to produce, and is probably the least common form of interpretation at living history museums in the US.

Family Learning in Living History Museums: Review of the Research

For a variety of reasons, very little research has been conducted specifically in the area of history and archaeology museums, and heritage sites (Hooper-Greenhill & Moussouri, 2000). There are even fewer studies on outdoor history museums – much of this review will deal with more general areas, and highlight the large gaps in the literature on learning in outdoor history museums.

What is a Family Group?

While family groups come in all shapes and sizes, Dierking and Falk (1994) assert

that most studies define families as social groups including at least one adult and one child, though typically no more than four adults and five children to keep the data collection process manageable. Using this definition, family groups constitute the majority of museum visitors (Hilke, 1989; Dierking, 1989; McManus, 1994; Ash, 2003). Earlier studies of family learning focused primarily on behaviors and interactions with exhibits (Ellenbogen et al., 2004). Within the last two decades, however, the bulk of the research focus on families has shifted to fine-grained analysis of family interactions as evidence of collaborative meaning-making (c.f., Rosenthal & Blankman-Hetrick, 2002; Leinhardt, Crowley, & Knutson, 2002; Ash, 2003). These studies examine both the process of constructing meaning and building identity among the family group, as well as the role of the museum experience in the family's larger social and cultural context (Stein et al., 2006). Within the museum context, family groups are acknowledged as "a major audience and unique learning group of mixed ages and backgrounds bound together by a complex shared system of past experiences, beliefs, and values" (Ellenbogen et al., 2004, p. S49).

Family Behaviors

Previous research has shown that families display an assortment of behaviors, while visiting museums, including observing one another, undertaking joint inquiries, pointing out exhibit elements and features to one another, and working together to explore hands-on exhibits (Falk, 1991; Dierking, & Falk, 1994; Borun, Chambers, & Cleghorn, 1996; Ellenbogen, Luke, & Dierking, 2004). Families follow a predictable pattern during their museum visit (Hilke, 1989; Falk, 1991) due, in part, to similar agendas and motivation for visiting. Falk (1991) established that family museum experiences consist of four

distinct phases: orientation (3–10 minutes), intensive looking (15–40 minutes), exhibit cruising (20–45 minutes), and leave taking (3–10 minutes). According to Gutwill and Allen (2010), however, due to various environmental factors, families may not take full advantage of the learning opportunities presented by museum exhibits. A particular problem is overcrowding, in that visitors interacting with an exhibit may feel pressure from the other families waiting to engage with it, and as such they may rush their experience or skip something altogether.

In addition to the behavior patterns of the visit, research has also been conducted on the specific activities families undertake. Parents are often already familiar with the subject matter of an exhibit and take the occasion of the museum visit as an opportunity to teach, and family members tend to exchange information across generations (Diamond, 1986). Families prefer activities that do not look like what they would do at school, and want to learn without realizing they are doing so (Sterry & Beaumont, 2006; Packer, 2006). Additionally, Ash (2004) found evidence that family members of all ages will seek out information, as well as verification of their understanding of an idea, from museum mediation resources, when they are available.

Family Conversations

With the shift in research focus to privilege family conversations as indicators of learning come some methodological constraints. The constant tracking and monitoring of more than a few family members during a museum visit, even with a team of researchers and video cameras, can be a difficult task. Much of the literature on family learning speaks to the conversations of parent-child dyads, and while this scholarship still addresses the collaborative nature of family interactions, the artificial boundaries

established by involving only a subset of family members clearly influence the learning picture that researchers capture. This is a limitation inherent in the next group of science center studies I describe.

Gleason and Schauble (2000) investigated the interactions between parents and children when both members of the dyad were unfamiliar with particular science content. They found that parents engaged in collaborative discussions with their children, and also shared responsibility during hypothesis testing. While parents were skilled in helping their children gather evidence, they were generally less adept at assisting their children in interpreting the evidence collected, making claims, and formulating beliefs. Similarly, the use of interaction strategies has been shown to depend on parent knowledge of and beliefs about the disciplinary content of the exhibits they were using with their children (Swartz & Crowley, 2004).

In another science museum study, Crowley & Callanan (1998) found differences in children's behavior at an exhibit based on their interactions with parents. When children explored a museum exhibit with their parents, they usually remained at the exhibit longer and engaged more profoundly with the exhibit as compared to their peers whose parents adopted the role of passive bystanders during the activity. Children were twice as likely to talk about what they were seeing in a museum exhibit when their parents offered explanations. Similarly, at an exhibit on evolution, parents' use of explanatory conversation positively related to their children's use of explanatory and evolutionary conversation, indicating parents and children engaged in sophisticated talk about challenging content in an informal educational setting (Tare et al., 2011).

In another study on the ways parents of 8– to 12-year-old children negotiate

discussion of challenging content, researchers found parents often used private references to personal experiences in their explanations and descriptions. In this way parents could relate the content of the "Mysterious Bog People" exhibit to something familiar to the child (Patterson, 2007). Parents also used more public references, such as connections to literature or movies, to help their children understand the challenging concepts of death and dying, human remains, forensics, and ritual sacrifice. Other research has shown that early elementary school aged children are able to gain a better understanding of an unfamiliar science topic or idea when a parent connects the idea to a child's previous experience or prior knowledge (Crowley & Jacobs, 2002; Valle & Callanan, 2006).

Conversely, there are times when the child in a family group is the resident expert on a particular topic. At a dinosaur exhibit, Palmquist and Crowley (2007) found that parents of children with novice dinosaur knowledge guided interpretations of specimens and their novice children actively participated as responsive learning partners in the parent-child dyad. In families containing children with expert dinosaur knowledge, parents no longer acted as a teacher or a co-investigator. Instead, the parent of the expert child asked questions that reinforced their child's existing knowledge, but relinquished their own responsibility for interpreting the information presented in the exhibit.

The majority of the findings have somewhat limited applications to living history museums, but they do highlight the complex nature of the social interdependencies in family learning. They also support the idea that that collaboration amongst family members may lead to richer and more fruitful learning experiences in museums.

Family Visits to Living History Museums

Almost all of the research on family learning has been conducted in science, natural

history, art (see Sterry & Beaumont, 2006), or children's museums (Swartz & Crowley, 2004). One notable exception is Rosenthal and Blankman-Hetrick's (2002) exploration, using the conversational model (Leinhardt & Crowley, 1998; Leinhardt, Crowley, & Knutson, 2002) as a framework, of family learning at Conner Prairie, a living history museum located in Fishers, Indiana. They found that the nature of a family's interaction with the costumed interpreters has the greatest impact on family learning, as measured by the types and number of learning indicators in the conversational analysis. Researchers conducting the conversational analysis considered a demonstrated vocalized connection between new knowledge and prior knowledge, as evidenced by conversation within the family group, to be a learning indicator. In particular, families were most likely to learn when an interpreter stimulated the conversation and was able to engage both adults and children within the family group.

As a result of the previous study, researchers also uncovered some unintended consequences of the interactions with first-person interpreters at Connor Prairie (Seig & Bubp, 2008). In some cases, families would primarily listen and not ask questions when in the presence of an interpreter, but would then talk about what they heard with each other as they walked on to the next exhibit. As they were replaying and discussing what they had heard, families would often become confused by the new information they had received, and with no interpreter present they were not able to get their questions answered or clarify their understandings. While poring over the transcripts of family conversations in the absence of an interpreter, researchers found "…numerous conversations in which parents were unpacking the information for the children and got it wrong, for whatever reason" (Seig & Bubp, 2008, p. 206). With no particular opportunity

to correct this, families left the museum with a false sense of understanding about what they had experienced.

Visitor Motivation and Agenda

Families are motivated to visit museums for a variety of reasons. In their research across multiple institutions, Anderson and Roe (1993) found that motivation for museum visitation fell roughly into five categories; education, duty, entertainment, social, and personal. The category of education includes ideas about visiting to learn, while the category of entertainment includes notions of visiting for fun. The social category involves the concept of the museum visit as a social undertaking, much like having a lunch with a friend or attending a play date. The category of duty includes ideas like "it is important to take my children to visit museums" or "we are in Paris so we should visit the Musée d'Orsay," while the personal category includes motivations such as "I loved this museum as a child so I want my children to have a similar experience."

Falk, Moussouri, and Coulson (1998) identified similar themes in their research and divided visitor motivations into six categories: place, education, life cycle, social event, entertainment, and practical issues. The characteristics of the education, entertainment and social event categories are the same as the findings from Anderson and Roe's (1993) research, while the other categories have significant overlap. The category of place overlaps with the category of duty, as when a family selects a museum trip because the particular cultural institution is unique to the locale they are visiting. The category of life cycle overlaps with personal, as when a parent wants to share a museum experience with her offspring that she has previously shared with her own parents or siblings. Life cycle also overlaps with duty in that many parents feel that families with

children of a certain age should engage in cultural activities together. Finally, the category of practical issues includes factors like parking, crowds, holidays, admission fees, weather, as well as a variety of other external factors. While people often identified more strongly with one category, most visitors' motivation for a particular visit fell across several different categories.

Packer and Ballantyne (2002) conducted research on the motivations for 300 visitors at three different sites (an art museum, a zoo and an aquarium) in Australia. Based on a factor analysis, they identified five categories of motivation; learning and discovery, passive enjoyment, restoration, social interaction, and self-fulfillment. Once again, these categories have substantial overlap with the ones identified in previous research.

In subsequent work on visitor motivation, Packer (2006) found that approximately 80% of visitors interviewed at six different educational leisure settings did not include "learning" as part of their stated agenda. A small percentage specifically denied the use of the places for learning, while the majority either did not intend to learn but were drawn into an experience of learning, or rejected the label "learning" but used words that described an experience most people would agree was educative. Visitors reported being attracted to information that connected with their prior knowledge or was easy to remember. Visitors often suggested the multi-sensory nature of the presentations as the reason for the enjoyment of their learning experience.

Focusing more specifically on heritage attractions in the United Kingdom, Malcolm-Davies (2004) found that the top three motivations for a person's visit to a historical site were to learn, to feel a sense of the past, and to have fun. Another recent

study of two different outdoor history museums in the US found that 39% of visitors reported "wanting to share an experience with family or friends" (Institute for Learning Innovation, 2009). This was the most prevalent motivation, followed by 31% of visitors who were visiting because they were in the area or knew the museum was a good place to visit. Liking to learn about history was the motivation for 26% of the visitors, while wanting to relax or be entertained was the motivation given by 24% of the respondents. Finally, only 2% of visitors reported connecting with the past as their motivation for their museum visit.

The paucity of visitors with the motivation to connect to the past seems to contradict Malcolm-Davies' (2004) findings, however this is likely due to the difference in research sites. The Outdoor Living History Museum Interpretation Research Project took place in two different museums, while Malcolm-Davies (2004) reports on findings from twelve different heritage attractions. These attractions likely draw a different type of visitor, perhaps one who is looking for a more outright historical experience. A comparison between the other findings of the two different studies shows a substantial amount of overlap. These are the only two studies conducted in this area in the past decade, which points to a serious gap in this area of the research.

Once they have decided to visit, not all people can or will identify an explicit "agenda" for a particular museum trip, but McManus (1994) suggests family members have agendas of their own. The family's social experience, she argues, is at the heart, rather than the periphery, of the museum encounter. Families generally arrive at museums with ideas, expectations, and hopes for what will transpire during their visit, though possibly not always in great detail. From a compilation of typically conducted exit

interviews at Conner Prairie, for instance, a pattern emerged as to the nature of visitors' expectations. Sieg and Bubp discovered

> …visitors to Conner Prairie were often at a loss as to what a living history experience would actually look, feel, walk, and talk like. Vaguely, they expected to learn something —they were unsure what exactly that would be— and they expected to have fun, although they were not quite sure what they would be doing (2008, p. 204).

While families were motivated to visit the museum, they were perhaps unprepared for what the visit itself would be like.

Whether their expectations are vague or concrete, family agendas include motivations for visiting as well as the strategies families utilize when visiting a museum (Hilke, 1989; Falk, Moussouri, & Coulson, 1998). Visiting strategies fall along a continuum of unfocused, such as "we're just here to see whatever looks interesting," to extremely focused, where a family knows exactly what exhibits they intend to visit or which objects they intend to see. Despite the fact these strategies are often implicit, family agendas have been shown to directly influence what is learned during a museum trip (Falk, Moussouri, & Coulson, 1998; Packer & Ballantyne, 2002; Falk, 2006).

The Role of Prior Knowledge

Assuming a constructivist stance and viewing learning as a process of meaning-making and conceptual change, everything a person learns is filtered through the lens of her prior knowledge and existing conceptualizations. Learners of all ages interpret new and novel ideas within the context of their present interests and understandings (Dewey, 1916). This means that prior knowledge is not limited to what has been learned during museums visits, but rather encompasses almost anything a person has learned or experienced in their lifetime. As such, it has a profound effect on how and what people

learn during a museum visit (Roschelle, 1995; Falk & Adelman, 2003; Anderson, Lucas, & Ginns, 2003; Falk & Storksdieck, 2005).

When looking at museum learning, prior knowledge could be measured in several different ways. Standard tests are generally not useful as this type of test presupposes a limited scope and an "expert" perspective, so a variety of other research procedures must be utilized. One technique is based on Piaget's clinical interview (Roschelle, 1995). A researcher gives the participant a focused, concrete task. She then probes as necessary, without using leading questions, in order to make visible the participant's thinking and subsequent understanding of the task at hand. Another similar technique is called think-aloud problem solving (Ericsson & Simon, 1984). Using this method, a researcher would give the participant a task, and ask that the participant simply vocalize what he is thinking as he works on the task. The researcher does not prompt for explanations or probe for understanding, but merely reminds the participant to continue talking should he stop saying what he is doing or what he is thinking. The audio or video from the session is recorded and then analyzed after the fact to uncover evidence of prior knowledge and conceptual understanding.

The personal meaning map (Falk, Moussouri, & Coulson, 1998) was specifically developed to harness the affordances of the previously mentioned practices while being uniquely suited to a museum environment. Just prior to museum entry, the visitor is asked to share their thoughts on a specific prompt, such as "immigrants to the valley of Virginia." The researcher probes as necessary, but does not use leading questions, to document and clarify the visitor's understandings. This first personal meaning map (PMM) establishes the visitor's baseline. A similar procedure is conducted upon exiting

the exhibit or museum, this time with a different color pen, so the visitor may add, subtract, modify, or clarify her thoughts and ideas of the given prompt. The comparison of paired data captured by the PMM elicits a portrait of a visitor's prior knowledge upon arrival as well as a record of conceptual change following the encounter.

The role of prior knowledge takes on additional social significance as families learn together in a museum. Parents facilitate attempts for their children to make connections between what they see and do in a museum, and their prior knowledge and experiences, as a family and as individuals (Diamond, 1986; Dierking & Falk, 1994). Depending on age and personality, this practice may be initiated by the children in a particular group, and manifests as discussions of what a family touches, reads, sees, hears, and does in connection with their family stories, memories and experiences (Ellenbogen et al., 2004). This shared experience with prior knowledge contributes to the sense of a family identity, which I explore in the following section.

Identities

Visitor motivation, family agendas, and prior knowledge are separate but related constructs that all contribute to the ongoing development of personal and family identity. According to Leinhardt and Crowley (1998), for instance, the construct of identity within a museum visit speaks to a family's motivation for the visit, the particular exhibits of interest during the visit, and each family member's prior knowledge as it relates to the contents of museum exhibits. During a museum visit, families talk about what they know from previous experiences, providing opportunities for adults and children to reinforce past experiences, build family history and identity, and develop a shared understanding (Dierking & Falk, 1994). Children have been participating in their family's activities

since birth, and they are uniquely qualified to learn from (and with) the members of their family.

In terms of personal identity, John Falk, in his more recent work (2006, 2009), argues that visitor motivation, identity, and learning are completely intertwined concepts that cannot be separated, as each informs the other in regard to the outcomes of museum visits. The trouble with the idea of visitor motivation is that it is static and essentially stops when the visitor walks in the door. In contrast, identity stays with a person throughout their entire visit. Falk proposes five different museum visiting "selves" based on motivation: the explorer, the facilitator, the professional/hobbyist, the experience seeker, and the spiritual pilgrim. Visitors tend to enact a particular self, or a combination of selves, during each museum visit. A mother of two young children may be "the facilitator" when visiting a children's museum with her daughters, however at an outdoor history museum on her own she may enact "the explorer". These identities are fluid, and people may move between them during a visit as well as between visits to the same or even to different museums.

Museums can also be seen as places to try on a different identity and briefly experience life from some other culture or time period. Rounds (2004, 2006) suggests researchers trust that "visitors are making wise choices when they exercise cognitive frugality in their use of the museum" (2006, p. 148) and engage only superficially or briefly with an exhibit. Taking on an identity inspired by an exhibit allows visitors to play at being someone else and examine how they feel in that role while remaining secure in their current personal identity. It does not require in-depth knowledge or a large investment in time but yields personal benefit to the visitor. This curiosity driven identity

framework could be particularly interesting in a living history museum because the subject matter relates to common people and their everyday activities.

Again, very little research has been conducted specifically in living history sites. A review by Silverman (1997) found that in order to be successful, live interpretation should permit museum visitors to situate public history in the context of their own family history, experience, and prior knowledge. Creating personal relevance is an important factor in the success of any staff-facilitated learning. This finding corresponds with known best practices for teaching history in formal learning environments as well (Bransford, Brown, & Cocking, 2000).

One of the ways families create personal relevance is through the mediating strategy of public and private references. When relating an idea or concept encountered in a living history museum, a parent might make reference to something only the family members might understand (e.g., does this roof remind you of the one on Uncle Barry's cottage?) as opposed to a reference that is part of larger popular culture (e.g., who pricked her finger on a spinning wheel in the fairy tale?) and would be more readily accessible to outsiders. Living history museums therefore afford the opportunity for a family to learn about each other, and create or affirm a sense of personal and group identity. Family meaning-making continues in this way long after the completion of the museum visit, but the nature of this discourse is often coded, so that an outside observer would not necessarily be able to recognize conversations that related to museum experiences (Stein et al., 2006). Much like Falk's museum visiting selves, the development and growth of a family identity is a fluid and ongoing process, both within and outside of museum visits.

Costumed Interpreters' Beliefs and Practices

Costumed interpretation, be it by a large group of full-time professionals or a small troupe of part-time enthusiast volunteers, is relatively popular at historic sites across the US, Canada, much of Europe and Australia (Renzthog, 2007; Institute for Learning Innovation, 2009). Despite its prevalence, very few historic sites conduct visitor studies that could inform the development, design and delivery of their costumed interpretation programs (Malcolm-Davies, 2004). While Connor Prairie, Old Sturbridge Village, and Colonial Williamsburg are a few notable exceptions in the US, there is a significant lack of research in this area, and the research that does get conducted is often proprietary and not released or published for the benefit of the community at large.

At the same time, there is also a distinct lack of research on the experience of being a costumed interpreter. Freeman Tilden's seminal work "Interpreting our Heritage" (1957) continues to be the most often-cited reference for interpretation technique. Other how-to manuals on technique exist (e.g., Roth, 1998; Beck & Cable, 2002; Bridal, 2004), offering strategies and guidelines for practice that are based on vetted interpretive philosophy and learning theory. The small number of research studies that have been conducted suggest that making an emotional connection with the audience and linking interpretation with visitors' previous experiences and prior knowledge are hallmarks of effective interpretation (Gross & Zimmerman, 2002; Ballantyne, 2003; Benton, 2008). Moreover, to facilitate visitor connections successfully, historic interpreters require in-depth knowledge of the artifacts and culture and must be proficient in a range of interpretive techniques. In addition, however, they must also know the audience and understand the significance that visitors attach to the artifacts and culture in order to

provide the most valuable interpretation (Wang et al., 1999, as cited in Gross & Zimmerman, 2002).

A particular exception to the general pattern of proprietary research is a report on a set of focus groups conducted over a three-year period at Colonial Williamsburg (Graft, 2001). This series of focus groups, conducted between 1993 and 1996, sought to improve the interpretive experience for family groups. Nine suggestions for costumed interpreters to better their practice emerged as a result of these sessions. These ideas include focusing on children in a family group, presenting them with challenges and letting them discover things for themselves, inspiring them to love history, and making an emotional connection with them. Many of these ideas mirror the earlier writing of Tilden (1957), but situate them in a more current and specific environment.

Beyond reading specific manuals and primary sources, the process of training as a costumed interpreter is highly variable, and differs greatly across living history museums. In a small pilot study, Craig (2008) observed, in one outdoor history museum, that newer costumed interpreters learned to do tasks at the periphery of the museum's community, spending a lot of time in their early months working with a seasoned mentor. The staff, including full and part-time paid members as well as volunteers of all ages, functioned as a community of practice (Lave & Wenger, 1992). Visitors' learning experiences were highly dependent upon the costumed interpreters and their particular engagement strategies. These strategies were dependent on an interpreter's belief about visitor learning, the interpreter's belief about his own learning, and his particular identity as a member of the community of practice (Craig, 2010). These findings align well with the

study discussed previously by Rosenthal and Blankman-Hetrick (2002), which also found interpreter engagement strategies to be critical to family learning outcomes.

A recent exploration of best practices and visitor outcomes (Institute for Learning Innovation, 2009) conducted by researchers from the American Association for State and Local History, the Institute for Learning Innovation, Conner Prairie Living History Museum, and Old Sturbridge Village is the most comprehensive study conducted in this area to date. While the research primarily focuses on visitors, a key component included data gathering from living history museum professionals. Researchers delved into the interpreters' understandings of visitor expectations and motivations, as well as the interpreters' perceptions of desired outcomes, the utility of the various interpretive formats, and suggestions for best practices.

Costumed interpreters add significantly to the visitor experience at the museums in which they work, however there are only a handful of studies investigating the beliefs and practices of costumed interpreters. Since the limited findings to date indicate the profound effect (positive as well as negative) costumed interpreters have on visitor leaning, this is an area in which further research is warranted.

Summary

This review of the literature has touched upon the history of museums as educational institutions as well as a discussion of select theories of learning, their application in museum environments, and their influence on visitor learning research. I also looked at the core programmatic elements of living history museums, with a focus on the three most common interpretive styles and their associated benefits and

drawbacks. Lastly, I explored prior investigations that place the following research questions in the context of history, theory, and the existing research and practice:

1. What is the learning experience of family groups interacting with historic interpreters in a living history museum?
2. How does an individual's prior knowledge and identity influence living history museum learning?
3. What are the family groups' beliefs about learning in a museum? What does learning mean to them?
4. What are the interpreters' beliefs about learning in a museum? What does learning mean to them?

The first research question is based on a sociocultural learning framework as it applies to a museum environment. It also speaks to the fact that there has been a profound lack of research on family visits to living history museums, or on the specifics of interactions between families and costumed interpreters.

The second research question acknowledges the importance of prior knowledge, visitor motivation and agenda, and family identity to the learning outcomes of a museum visit, and explores how these ideas might influence a family's experience in a living history museum.

The third and fourth research questions recognize that meaning-making is a social, collaborative, highly context dependent process. Understanding beliefs about learning from both the perspective of the costumed interpreter and the family of visitors provides a finely detailed picture that can in turn inform the first research question.

CHAPTER 3

METHODOLOGY

Overview

In this chapter, I outline the methodology used for this study. I begin with a rationale for utilizing a qualitative approach to this research undertaking. Next I describe in detail the research setting and the participants in my study. I then lay out a comprehensive description of the study's design, including all activities and data collection methods, as well as data analysis procedures and processes. I finish with a discussion of my biases and preconceived notions as a researcher who is both a participant and an observer in the study, and address potential threats to validity.

Rationale

A qualitative research design is most appropriate for understanding meaning and the process of events and phenomena (Maxwell, 2005). Strauss and Corbin (1998) assert that "…qualitative methods can be used to obtain the intricate details about phenomena such as feelings, thought processes, and emotions that are difficult to extract or learn through more conventional research methods" (p. 11). For this undertaking I was interested in the process of learning a family goes through during their visit to a living history museum, as well as the meaning-making process that occurs in the interactions between families and historical interpreters. I was also interested in how an individual's prior knowledge and identity influence her conversational interactions.

As stated in the previous chapter, there have been numerous approaches to documenting, understanding and investigating learning in museums. The proliferation of living history museums in the US is a comparatively recent phenomenon (Rentzhog, 2007), with many museums tracing their founding to the American Bicentennial in 1976. At this time, formal educational theory had already begun to shift towards a more cognitivist approach (Lagemann, 2000), though the daily practices were still greatly influenced by behaviorism. Consequently, museum learning was largely assessed through a behaviorist framework, using only quantitative methods. The focus was on the individual and her immediate experience, with paper and pencil tests being used to measure stated objectives. Other common measures and indicators of learning included recording the time visitors spent on tasks like getting oriented, reading labels or other descriptive text, talking to other visitors, looking at exhibits, and way-finding. In short, assessment, and subsequent refinement of learning design, was guided by that which could be easily observed.

This approach is fairly limited, particularly when it comes to measuring a museum's stated objectives, which are often extremely vague due to the broad range of offerings in most living history museums. An approach that better aligns with the realities of the museum recognizes visitors' meaning-making as influenced and mediated by many factors beyond the immediate experience. These factors include culture, previous experience and prior knowledge, as well as the type of group in which they visit. Additionally, the use of indicators of learning like the content of visitors' conversations, and not just the amount of time they spend conversing, acknowledges that the visit is just a small part of a lifelong learning experience and not an isolated instance. Since my

interest was on "the specific structure of occurrences rather than their general character and overall distribution" and "the meaning-perspectives of the particular actors in the particular events" (Erickson, 1986, p. 121), a qualitative approach was most suitable for my inquiry.

Interpretivism

This research was undertaken within an interpretivist paradigm, which comes with a particular set of ontological, epistemological, and methodological assumptions. In terms of ontology, the interpretivist paradigm presumes a relativist approach, wherein reality is local, contextual, and constructed. There are multiple realities and they cannot be separated from people – there is no one single reality that exists for everyone.

The epistemological assumptions of interpretivisim, or the assumption on what counts for knowledge, are meaning structures of actions – the physical behavior of a person and the meaning interpretation she ascribes to this behavior. Findings are created; they do not just exist in the world waiting to be discovered. Additionally, the meaning one actor might assign to a particular behavior might be very different from the meaning given to the behavior by a different actor, even in the same situation or amongst close family members. Taken collectively, the meanings the individuals attributed to the behaviors I observed in the museum, in addition to my own meaning impositions, shaped the research findings.

As meaning in the interpretivist paradigm is contextual and person-specific, I shunned the application of preset categories to my fieldwork in the museum setting. Instead I kept myself open to the patterns, categories, and themes that arose in the process of my time in the field and in the context of the living history museum. Since

understanding actions requires looking at sequences of actions, I focused on pattern discovery and recognition, privileging them above isolated acts and unusual events in the data corpus.

In terms of how data are obtained, the underlying assumption that all methods may be fallible requires a multiple method approach to data collection. Relying on a single source of data constitutes mono-method error. To address this assumption, I made use of observations, interviews, and document collection throughout the research process. I also did not use instruments to collect data; rather I myself was the instrument. Every piece of data collected was viewed through my own lens, biases and all.

Research Strategy

My goal was to make sense of the process of family learning in a living history museum and to unpack the meanings of and beliefs about learning of both family members and historical interpreters. To do this, I employed a combination of observations, semi-structured and structured interviews, and document collection. These multiple sources made up my data corpus, which I then explored through the particular research strategy of analytic induction (Erickson, 1986).

Research Setting

The project site was a medium-sized outdoor living history museum located in Central Virginia, which had approximately 66,000 visitors in 2009. I chose this site as a setting of convenience as I had already worked on an educational video project there, and had also conducted pilot research for this current study. As such, I had already established inroads for gaining access. The Museum currently features nine permanent, outdoor exhibits largely comprised of original farm buildings from West Africa, Britain,

Ireland, Germany, and Virginia (see map, Appendix A). These buildings, with the exception of three exhibits that were built on-site due to logistical difficulties, have been carefully documented, dismantled, transported to the Museum site, and restored. The Museum's exhibits serve as the "settings for interpretative and educational programs designed to increase public knowledge of the diverse Old World origins of early immigrants to America, of how these immigrants lived in their homelands, how they came to America, and how the way-of-life they created together on the American frontier has shaped the success of the United States" (Frontier Culture Museum of Virginia, n.d.).

The Old World exhibits are fairly equally spaced along a loop road. The preferred direction of travel for the self-guided tour starts at the newest exhibit, the 1700s West African farm, which represents a free Igbo household in the Biafran hinterlands. Here visitors can ask questions of museum staff, who are not wearing costumes but are rather identified by a museum ID badge, as they interpret the reproduction farm buildings. The entire compound was built on-site, and the museum staff (as well as a group of volunteers) utilized the traditional construction techniques they learned through an apprenticeship with a group of visiting Nigerian artisans and craftsman to make the compound's structures.

The West African farm is surrounded by a low, thatched mud wall on all four sides. The entrance to the compound is through intricately carved double doors at a gap in the front of the wall. There are four small buildings within, each made of clay and sand. Most of them have only one room, though the biggest one is divided into two rooms. Each building has a steep, thatched, gabled roof. The doorways are quite low, so an adult has to duck to go inside, but there is plenty of headroom inside the houses themselves.

The four huts are the Obi (where the man conducted his business and socialized), the man's house, and the houses of his first and second wives.

The visitor continues along the path to the 1600s English farm, followed by the 1700s Ulster forge, the 1700s Irish farm, and then the 1700s German farm. From there visitors may walk or take a golf cart tram to the New World exhibits. The first of these exhibits that visitors encounter is the 1740s settlement site, an exhibit where museum interpreters and staff recently finished building, using period techniques, a 16' x 14' one-room log cabin. This exhibit represents the initial shelters immigrants built upon first arriving in the valley of Virginia. Beyond the settlement site is the 1820s American farm, the 1850s American farm, and the 1850s American schoolhouse. The schoolhouse, like the settlement, was also built on-site using traditional techniques.

Each of the exhibits is usually staffed by between one and four costumed interpreters, though as noted earlier there are no costumes in West Africa, and not all volunteers wear costumes, either. Some volunteers dress in the manner of the West African interpreters, wearing museum logo clothing and an ID badge to indicate they work at the museum. Both museum staff members and volunteers, who range in age from teenage participants in an after-school program to senior citizens, interact with visitors at most farms. The settlement site and the schoolhouse are not typically staffed during daily programming, and are predominantly used for school groups and other special programs. In addition, the Forge and the West African farm are often closed for an hour while the lone on-site interpreter takes his or her lunch break.

All costumed interpreters work in the third person interpretation paradigm. As mentioned in chapter one, this means they dress in period clothing but they speak in

contemporary language and acknowledge the shared culture between historic interpreter and visitor. Interpretation generally begins with the interpreter sharing what he or she is doing that particular day, such as a particular baking or gardening project, or possibly some history of the farm or the family that was known to have lived there. Some days have specific themes, such as "wool days," where most of the activities the interpreters initially engage the visitors with have some connection to the theme of production of wool, e.g., baby lambs, shearing, washing, dyeing, carding, and/or spinning.

The preferred route through the museum, as described above, takes between two and two and a half hours to complete, according to the estimate given by staff at the visitor center. The Old World portion contains about 70% of the museum's staffed exhibits, and is the original site of the entire museum prior to the 2007 expansion. As such, return visitors often budget their time without realizing 30% of the staffed exhibits have been moved to a new location, and then end up rushing through the American exhibits at the end. Similarly, first time visitors, despite having a map with the locations of all seven regularly staffed exhibits, have little idea as to the museum's full scope. Even knowing the loop road is approximately half a mile long does not really prepare families for planning their visit, as they focus on how much they are walking or riding in between exhibits, and not on the time it takes to actually visit a farm. The current arrangement seems to exacerbate the typical museum fatigue (see Davey, 2005, for a review) as almost all visitors end up rushing on the New World side.

Participants

Family Groups

The participants in my study included both family group members and museum staff members. The family groups had a minimum of two members – at least one parent

and one child who was between seven and eighteen years old. The lower age boundary was originally chosen to make sure the children participating could read, write and fully participate in the family interviews, conversations, and experiences. I later relaxed this criterion when it became apparent how difficult it was to find families meeting it during summer vacation. There was a maximum group size of five family members. This limitation was to keep the interviews and activities on a manageable scale for the family members as well as to keep data recording and observations feasible for a solo researcher. The pilot study for this research included three families, so in order to explore a wider range of experiences, additional families were included. Rosenthal and Blankman-Hetrick's (2002) previous study of families at Conner Prairie followed five families, so I opted to include six family groups in my research.

There were no particular exclusion or inclusion criteria other than group size and age ranges, so any group appearing to meet the selection criteria was approached upon entering the museum. The study was explained and, if the group actually met the criteria, they were asked to participate. My pilot study was conducted during the spring when most family group visitors could be described as nuclear families. For this study, data were collected in the summer and the composition of the typical family group was different. While one group that participated was a typical nuclear family of four, and another was a mother-daughter twosome, most other groups contained additional members including grandparents, nephews, and friends. In two cases, there were children under the age of eighteen accompanying a family group where the adults present did not have authority to consent to the children's participation. In those cases, I noted the interactions that were observable by a bystander, but did not include those children in the

pre or post activities, nor did I include them in any interviews or follow-ups. There were no incentives to the families and their participation was entirely voluntary.

Six family groups of anywhere between two to five family members participated in the study. The youngest child was seven and the oldest was sixteen. Four of these family groups were recruited from the admissions area of the museum, while the other two responded to an inquiry on an email list as to potential visitation.

Table 1: Participant Descriptions – Family Groups

Family	Children	Parents	Other Members	First visit to museum?	Length of visit
Whitaker	Darby (10)	Michelle	Grandma Grandpa	Yes	2.5 hours
Landry	Arwen (7) Zane (9)	Oliver and Tracy		Yes*	2 hours
Cole	Boy1 (13) Boy2 (15)	Diana	Grandma [cousin]	No	1.5 hours^
Olsen	Hope (9) Larry (10)	Ellen	[friend]	No	3 hours
Segal	Amira (7)	Naomi	[Max] [baby]	Yes	3 hours
Vermaak	Harper (16)	Zoe		No	6 hours

Note. Names in brackets indicate they were not research participants. Some were too young to participate, and others did not have a parent present to consent.
*Oliver had visited the museum previously, the other family members had not.
^The Cole Family only visited the "Old World" farms.

The children in the first four families all attend traditional school, while the latter two families are composed of homeschoolers. One of the latter families contained two children who did not meet the age criterion, a one-year-old baby in a back carrier and a five-year-old younger brother, however I included the family anyway as this was their normal learning configuration (i.e. the seven-year-old eligible girl conducts much of her

schooling in the presence of her younger siblings). Much as was the case with the extraneous friends or family in some of the other participating family groups, I largely focused my observations on the seven-year-old and her mother.

The groups were visiting the museum for a variety of different reasons. The Whitakers and the Landrys both visited in conjunction with larger family vacations. While Grandma Whitaker had known about the museum for years, from signs on the freeway and word of mouth, she never had a convenient opportunity to stop in and visit. This time, the museum was located nearly halfway between where they spent the night in New Jersey and where they were traveling to in North Carolina, and so they were able to stop. Oliver Landry had visited the museum once before without the rest of his family, and thought his family's trip from Tennessee to Washington, DC provided the perfect opportunity to return together. The Coles were visiting the museum from nearby Roanoke, VA, in part to see a cousin of theirs who was working as a summer intern. The Olsens, visiting from another nearby town, came for a day trip. Finally, both the Segals and the Vermaaks were visiting the museum as part of their educational activities.

Historic Interpreters

Seven interpreters who were working on the days I collected data on the family groups also agreed to participate. In addition to their role as costumed interpreters, some of these participants additionally served on the museum education committee. Their participation was also completely voluntary and without incentives. In order to explore what visitors were supposed to learn, institutionally speaking, I also enlisted the participation of an upper-level museum administrator on a voluntary basis.

Table 2: Participant Descriptions – Interpreters

Name	Years at the Museum	Primary Farm(s)	Status
Brian	2	West Africa	Part-time
Caleb	4	Germany	Full-time
Corey*	4	All Farms	Full-time
Travis	1	1850s America	Intern
Alistair*	20	All Farms	Full-time
Stella	10	England	Full-time
Grace*	7	New World	Full-time

Note. *On the education committee

Brian started as an intern the previous summer, in large part to help with the building of the West African farm. He has a bachelor's degree and grew up in a family of educators, but has no formal training in education himself. He does not do many skills or crafts, but is in training to become a blacksmith. Unlike almost all of his fellow interpreters who wear costumes, Brian wears a museum logo polo shirt, khaki pants, and an ID badge while working. He is in his early 20s and average height, with sandy brown hair, an athletic build, and a warm, friendly smile. He is extremely laid back and comes across very casually, but once he engages with visitors he can discuss almost anything Igbo-related with them, for great lengths of time.

Caleb has been an interpreter for four years, has a master's degree in Acting and a Bachelor's degree in History. He works on many of the Old World farms and in the Forge as one of the Blacksmiths. He is the only interpreter I worked with who had previous experience working in a museum. Since working at this museum, he has learned to knit, weave on the Irish loom, and play the dulcimer at the German farm. He is in his late 20s, tall, with dark hair and broad shoulders. He is engaging, garrulous, and has a great sense of humor. His interpretive style is animated, expressive, and tends towards dynamic storytelling.

Corey, who has been an interpreter for four years, taught World Civilizations in high school the year before he started at the museum and has a master's degree in History. He started primarily on the English farm, where he took an active role with the livestock, especially the sheep. He then took a keen interest and participated heavily in building the West African farm. Over the years, he has become very skilled at facilitating school groups, and as such has now worked at every single farm. He is like the Swiss army knife of costumed interpreters, able to provide what is needed on whatever farm is in need at the time. He is in his late 20s and about average height, with an athletic build, dark curly hair and a goofy smile. He is friendly, talkative, eager, and earnest.

Travis was an intern over the summer who had previously worked as a teenage volunteer at the museum when he was in middle school. He is starting his senior year in college, and thought a summer at the museum would be a nice change of pace in between semesters. He primarily works on the 1850s farm, which is the same farm he worked at as a teen volunteer. He is tall, with broad shoulders, but quiet and unassuming. He seems a bit shy upon initial meeting, but warms up quickly and grows animated when talking about something that interests him.

Alistair was one of the first eight interpreters hired by the museum when it opened more than 20 years ago. He has a degree in History and Education, but opted for a role as a museum educator over a classroom one when he first graduated from college. He is currently the Director of Interpretation at the Museum, but spends considerable time in costume at whatever farm is most in need of his talents at the moment. He is known for his skill at shearing sheep and building fences. He is in his late 40s, has a medium build, and a mop of salt and pepper hair. Around the museum, he is constantly in motion and

often seems to be pulled in many directions at once. When talking with visitors, however, he is extremely focused and captures their attention with his convivial attitude and comprehensive knowledge about history and culture.

Stella has been an interpreter for 10 years. She is a mother of three, and has a bachelor's degree in Elementary Education as well as experience teaching classes for Parks and Recreation. She works primarily at the English farm, and is particularly skilled at cooking and baking, as well as spinning, knitting, and cheese making. She is also one of the few women at the museum who shear sheep. She is in her 50s, has shoulder length brown hair and extremely expressive eyes. She is very open and friendly, has a natural ability to connect with people, and can get visitors involved in all sorts of activities on the farm.

Grace has been an interpreter for seven years and comes from a long line of educators, though she has never taught formally herself. She primarily works on the New World farms. She is in her mid 50s, wears wire-rim spectacles that perch atop the bridge of her nose, and her bonnet always covers her chin length hair. She has a boisterous, bubbly personality and her speech is sprinkled with many offbeat habitual phrases. She is very approachable and has a keen understanding of interpersonal dynamics.

Design of the Study

For each family group in the study, the session began with a short interview to obtain basic demographic information as well as some information on the family's museum going and other leisure time activity practices. Four of the six families declined to participate in the next activity, as they either had a non-family member with them or were anxious to get on with their museum experience, so we just moved on to the visit.

In the case of the other two families, I then asked them to, collectively, since learning is a social activity, create their family meaning map. This was a loosely structured web diagram with the central concept of "Immigrants to the valley of Virginia" and I gave them 10-15 minutes to elaborate on the subject as much as they could or would like. I took notes during the interview and meaning map exercise. After these initial activities, I observed the family for the rest of their visit. I made audio recordings, when possible, of the interactions between family members or family members and interpreters.

At the end of the visit, I closed with a follow-up meaning map exercise for the two families that participated in the task pre-visit. This time, the families used a different colored pen to update, add, delete, or otherwise revise their previous map and completed a brief survey to assess their learning experience. I then contacted the family groups again, via email, one month after their visit, and asked them to complete a follow-up survey about their learning experiences during the visit I observed. In one of the cases, a final round of family meaning mapping was also completed. It was during this last interview and mapping session that I employed photo-elicitation with the kids. I used the photos the kids took during their visit as a jumping-off point for their recall and discussion. It is of note that most of the kids only took pictures at the first exhibit or two and lost interest in using the camera fairly early on during their visit, so there were not a lot of photos to use during this part.

As soon as was possible after the initial family data collection, I interviewed the participating costumed interpreters who interacted with the family groups in the study. I also periodically observed the interpreters interacting with other visitors during the course of the study. In the pilot study, some interpreters kept reflective journals, but

finding time to write up reflections proved difficult this time around. Instead of a journal, I stopped in for a very short visit with the participating interpreters every day I was collecting data. I made notes on these brief reflective chats we had about their experiences with both the families in the study and the visitor population at large.

In addition, I collected documents from the education and interpretation departments, including interpretive material used for school groups, maps that are given to visitors, and broad outlines of interpretive master plans. I also interviewed several members of the education committee and a member of the museum's upper level administration. These interviews formed the basis of my understanding of the range of expected outcomes of a family visit, educational and otherwise, from the museum's perspective.

Field notes were recorded during the entirety of a family's visit, as well as during observation sessions of cooperating interpreters. Notes pertaining to eye contact, body language, question asking, parental facilitation strategies, and interpreter management strategies were the main focus of observation. The field notes were jotted on legal pads during observations. As soon as was possible after the initial visit, and generally within an hour after the end of an observation session, I reviewed and annotated my notes. I then transcribed and wrote memos using a word-processing program within 24 hours of the particular observation.

Focus of Observation during the Museum Visit

My observations broadly included what family members said and did throughout their visit, but I paid particular attention to the following aspects of the visit: eye contact,

body language, question asking, parental facilitation strategies, and interpreter management strategies.

Eye contact. Throughout the visit, where is everybody looking? Eye contact is a good indicator of attention and, as such, is a likely proxy for potential learning. An individual who makes frequent eye contact with their family members and the interpreters they encounter on the various farms is probably more invested in a visit than a visitor who makes scant eye contact. Likewise, where are the interpreters looking while they are talking with the families?

Body language. This is especially true with regard to the younger members of the family groups, but for all visitors body language is another good proxy for attention. Are people participating in a conversation? Are the younger members of the family rolling their eyes, crossing their arms, playing with their hair, fidgeting, trying to get their parents' attention, or wandering about? Or are they leaning in, open to the ideas? What about the parents or other adults in the group? How are they acting?

Question asking. Who is asking questions, children or adults? Does the interpreter ask questions of the visitors? Do the visitors ask questions of the interpreters? Do the visitors talk to each other? Are the questions cursory, or do they speak to a deeper level of engagement or understanding? Do visitors ask one question and then move on, or do they remain and ask multiple questions, with follow-ups, on multiple topics?

Parental strategies. What do parents or other older members of the group do to facilitate learning for their children? How do they engage and include them? Do they discipline them in any way? Do they let the children wander and do whatever they want? Do the parents or other adults model interactive behavior, either with the interpreters or

with other visitors? Do the adults prompt, nudge, or suggest that the children talk to the interpreters? Do the adults connect what the interpreters are saying to their children's prior knowledge or prior experience?

Interpreter strategies. What sort of techniques do interpreters use to engage the visitors? Do they interact with whole groups, or with subsets, speaking with one or two particular visitors? If so, which visitors do they interact with? Do the interpreters engage visitors in a dialogue, or is it more of an explanatory monologue? Do the interpreters flexibly adapt their conversation to the level of the participants, or do they take a one-size-fits-all approach? These questions all speak to the interpreters' personal beliefs about learning and what learning means to them.

Data Gathering

Three different data gathering methods were used in this study: observations, interviews, and document collection. Each type of data was gathered from multiple sources to obtain a more holistic account of the interactions between family groups and costumed interpreters. To this end, observations were conducted on family groups and interpreters, both when interacting with each other and on their own, exploring the museum or interacting with other types of museum visitors. Interviews were also conducted with both family groups and costumed interpreters.

The data gathering consisted of participant observation of the family group visits, with particular attention to family group/interpreter interactions, as well as the previously mentioned points of observation. Descriptions of the private and public references families used, as well as the other mediating strategies families employed while discussing their museum visit, were also recorded. I gave the children in the family

access to digital cameras, although, oddly, they did not seem very enthusiastic about using them. I used the few pictures the kids did take during the visit, with the addition of commentary they provided, as part of my document analysis. In addition, these photos served to remind them of their trip when I conducted the follow-up interviews.

Several short interviews (pre-, post-, and 1-2 months post-visit) were conducted with family groups. A longer semi-structured interview (approximately 1 hour in length) with participating costumed interpreters was also conducted, and these historic interpreters were also observed interacting with other museum visitors (adult-only groups, school groups, etc.). Additionally, periodic reflective chats with the participating interpreters were conducted on an ad hoc basis during data collection days. Finally, semi-structured interviews of about 45 minutes in length were conducted with museum education stakeholders.

Additionally the final data source was an adapted group-oriented "personal meaning map" (Falk, Moussouri, & Coulson, 1998) known as "family meaning mapping" (Craig, 2008) as a pre-/post-visit measure for the family group visitors. These documents will undoubtedly contribute to the process of learning in the museum and, as such, this limitation will be noted in the final write up. I addressed validity concerns by triangulating both the data and the methods in the study. I also kept a methodological journal to further ensure validity.

Data Analysis

This inquiry was guided by Erickson's (1986) model of analytic induction. The goal for the researcher is neither to develop large-scale theory nor to gather evidence in support of already existing theory. Rather, the researcher seeks to elucidate what goes on

in a specific environment. This is accomplished by gaining an understanding of what is happening in terms of actions and meanings in their setting, finding the structure and organization of those meanings, and relating those meanings to the larger social structure.

This process of data analysis is an holistic undertaking. It involved producing empirical assertions from the data throughout the fieldwork experience and then establishing evidentiary warrants for the assertions from the data corpus. This process was accomplished by reading and re-reading every piece of data I collected, constantly scanning and searching for an intuitive leap to describe what I saw in the body of data from interviews, observations, and artifacts.

Once I had an assertion in mind, I combed through the data again for disconfirming evidence. When such evidence was found, I modified the assertion to fit the data. If the disconfirming evidence became so great as to outweigh the original assertion, and the assertion could not be modified to reflect the discrepant cases, it was discarded. This process of scanning though the data for both confirming and disconfirming evidence was performed frequently and continuously throughout my time in the field as well as when reviewing my fieldnotes afterwards. Once a preponderance of evidence was established for a particular assertion, it became tenable.

This process was employed with my field notes and interview transcripts from the families and the interpreters, the responses from the families' post-visit surveys, the data from the delayed follow-up interviews, and all of the documents I collected. While the family meaning maps are a part of the data corpus as a whole, and were treated as such, they were also analyzed in a manner similar to the one used by the research on which the

task is modeled (Falk, Moussouri, & Coulson, 1998), so as to look at specific learning outcomes.

I applied the method of analytic induction to this particular study in the following way. In June 2011, I began my data collection by interviewing an upper level museum administrator to gain an understanding of the institutional perspective on the free-choice nature of learning in a living history museum. This laid the groundwork for my understanding of the museum's curriculum, which was further elucidated through interviews with members of the education committee. I produced transcripts of these interviews and analyzed them repeatedly to scan for patterns and themes.

I then began recruiting historic interpreters to interview and observe, and conducted several observation sessions with these interpreters interacting with other museum visitors before I started recruiting family groups. I recorded jottings, that were elaborated into full field notes later that day, from my observations of each of these sessions. I also gained access to a number of documents from the museum's education and interpretation departments. I started to compare the field notes with the transcripts of the previous interviews and the institutional documents, looking for emerging points of interest and intersection among the data obtained from the museum staff. I kept a record of my thinking through the writing of analytic memos during each day of data collection.

The next phase of data collection was the field notes from observations with family groups as well as the transcripts from their interviews and, in some cases, their family meaning map. As data for the families were collected over a longer period of time, I looked at the data from each family's session separately to identify emergent themes and patterns, and then re-read it as part of the larger data corpus to connect those themes

to the larger data record, or identify the theme as a discrepant case seen only in a particular instance or for a particular family. I also looked for frequent and rare events to give further insight to the emerging themes and tentative assertions. I engaged in this family data review process iteratively for all six families, and again with all six family follow-ups, the last of which was completed in November 2011.

During the family group observation phase, I conducted hour-long interviews with participating historical interpreters, and the transcripts and field notes from these sessions were reviewed in a similar manner to the rest of the data corpus. I also made notes from the brief reflective chats I had with the participating interpreters during most of my data collection days. When possible, I would also take advantage of the participating interpreters to triangulate data I had collected from other interpreters, discuss nascent assertions, and debrief on family observations.

In addition to the daily analytic memos addressing my specific thinking on the emerging themes and connections across the research, I also kept a personal reflective journal. This journal served to chronicle the evolution of my own experience, thoughts, and opinions, and allowed me to track and be aware of my reactions to the research I was conducting.

Data Reporting

The data reporting, in keeping with Erickson's (1986) approach of analytic induction, consists of a series of assertions illustrated by examples from the data corpus. The assertions are framed by interpretative commentary, highlighting both the general and specific nature of the particular assertion. Narrative vignettes, quotes from interviews

and field notes, and graphics, such as tables, diagrams, and flow charts, also accompany the assertions.

The general descriptions serve to demonstrate the frequency of the events or occurrences that justify the assertion, while the particular descriptions provide the direct evidence to validate the findings. The interpretive commentary frames each assertion both before and after the general and particular descriptions. According to Erickson (1986), an examination of theory that supports the significance of the descriptions in addition to a depiction of how the researcher's viewpoint evolved throughout the study should be included as well. Thus the reader has ample context to shape her understanding of the assertions.

Criteria for Validity

The immediate and local meaning of actions, as defined by the actors' point of view, is the basic criterion for validity (Erickson, 1986). Threats to validity, then, include inadequate amounts of evidence, inadequate varieties of evidence, faulty interpretation of the evidence, inadequate disconfirming evidence, and inadequate discrepant case analysis. In order to address the potential threats to validity in this project, I did several things. I began by spending over 30 hours in the field. This ensured that I collected an adequate amount of evidence for patterns in sequences of actions to emerge. I made use of observations, interviews, and document collection throughout my data gathering, thus making certain I had adequate variety of evidence. Next, in the chapter that follows I have included selections from the corpus of data sources in the form of vignettes, quotes, and graphics in order to verify, for the reader, the accuracy of the assertions I have generated. Finally, I have included only those assertions that were supported by a

preponderance of evidence and took into account both confirming and disconfirming evidence.

Researcher as Instrument

This dissertation study is a piece of qualitative research and, as such, I am the instrument. I do not see myself as separate from this path of inquiry or from the data collection and analysis process. As a master's student exhausted by the intractable problems of urban school reform, I shifted my focus drastically and became interested in how people learn in free-choice environments. I began my doctoral program here with that research focus in mind, and have followed that thread in a number of directions. Most recently I've focused on living history museums, as the possibilities for inquiry and discovery in such a museum seem almost limitless. I conducted a pilot study in this area three years ago, and found that, for every assertion I made or new piece of evidence I gathered, I had more questions to ask.

A study of family interactions is also of great personal relevance as I am the mother of two daughters; the elder is six years old and started first grade this past fall, while the younger one is 27 months old. Additionally, the challenge of exploring learning in a loosely structured environment appeals to me personally.

I acknowledge and recognize that my prior reading on museum learning and experience in museums with my family of origin may have biased my interpretation of the data. I have tried to be aware of these possible biases and, in order to avoid the imposition of generalizations from my past thinking and experience, I engaged in several tasks as suggested by Erickson (1986). I examined my own assumptions about the topic of family interactions in a living history museum and worked to make conscious choices

not to impose these assumptions onto the study. Additionally, I sought to gain the perspectives of the participants by documenting participants' behaviors plus the meanings that they ascribed to these behaviors. Finally, I engaged in the process of memo writing throughout my time in the field.

Summary

In this chapter, I outlined the methodology that was used in this study on family learning in a living history museum. I have provided a rationale for utilizing a qualitative approach to this research undertaking. I have described in detail the research setting and the participants in my study. I also presented a comprehensive description of the study's design, including all activities and data collection methods, as well as data analysis procedures and processes. I have reflected on my biases and preconceived notions as a researcher who is both a participant and an observer in the study, and addressed potential threats to validity.

CHAPTER 4

RESULTS

Overview

The purpose of this study was to explore family learning in a living history museum. Based on a review of the literature on family groups as museum visitors, family group behaviors and conversations, and the role of agendas, motivations, prior knowledge and identity, as well as a review of costumed interpreters' beliefs and practices, four research questions were posed:

1. What is the learning experience of family groups interacting with historic interpreters in a living history museum?
2. How does an individual's prior knowledge and identity influence living history museum learning?
3. What are the family groups' beliefs about learning in a museum? What does learning mean to them?
4. What are the interpreters' beliefs about learning in a museum? What does learning mean to them?

The data for this study were gathered and analyzed in a manner consistent with Erickson's method of analytic induction (1986), as described in Chapter 3. Beginning with my review during fieldwork and continuing once I left the field and focused solely on data analysis, several themes began to emerge in relation to the research questions.

As a result of this iterative process, eight assertions were formed after repeated and meticulous review of the data corpus.

1. The museum's organizational intention is to actively engage family groups with the daily life experiences of people who lived during a time in the past. The museum's narrative and desired outcomes for family groups are translated into a curriculum that is presented to visitors using multiple, though not directly specified, learning theories.
2. Historic interpreters believe they are educators, but that visitor learning involves education and entertainment. They strive to balance those tensions in their interpretive strategies and their interactions with families.
3. Family learning experiences are the interactions of the museum's narrative as portrayed by the historic interpreters combined with the family's own agenda and preference for visitation style.
4. Families believe living history museum learning lets them experience history up close through seeing, feeling, hearing, touching, and smelling.
5. An individual's prior knowledge can influence living history museum learning by way of personal connections to new ideas. Prior knowledge may also create a false sense of understanding, particularly in the absence of historic interpreters.
6. An individual's identity can influence living history museum learning by way of personal connections in the form of family stories and imaginative play.
7. Weeks after their visit, family members remember both the personal and the novel, but neither in much detail.

8. The museum's educational intentions are transformed through the successive layers of interpretations by the costumed interpreters, the family group as a whole, and the prior knowledge and identity of the individual family members.

Assertion 1

The museum's organizational intention is to actively engage family groups with the daily life experiences of people who lived during a time in the past. The museum's narrative and desired outcomes for family groups are translated into a curriculum that is presented to visitors using multiple, though not directly specified, learning theories.

The Museum's Narrative

Museum learning is a free-choice endeavor, and living history museums tend towards a more open-ended set of educational goals. While a list of all the possibilities of what family groups might learn during a museum visit would be truly staggering, the museum itself does have a tightly focused high-level educational goal. According to Daniel, an upper level administrator, the mission of the museum is to:

> Daniel: Show the origins of American frontier culture, and by extension, American culture. For the casual visitor it is a different approach because we have these old world exhibits where we're showing the origins and the culture that early colonists to the thirteen North American colonies came from, what they brought with them to America. Then on the American exhibits we're supposed to show how those cultures blended, how their customs became part of what would be regarded as American culture, and then how that culture was carried across North America through time and space.

The museum has a more specific and highly connected theme than is typical of other living history museums, perhaps, so the ideal learning goals are a bit more specific than general ones of "bringing history alive" or "connecting with the past." In particular, Daniel identifies the Old World side of the museum as showing the home culture of the

people who would go on to populate the original colonies, and the New World side as what the amalgamation of cultures became once they were established in America. The third part of the mission addresses how the New World exhibits that were once considered the frontier slowly became established and settled, and the frontier moved westward.

In order to explore how individual interpreters understand and portray the institution's educational mission, I asked them each to share with me their take on what the museum's narrative is about, and what they might expect visitors to learn. What follows are their responses:

> Travis: The differences between old lifestyles and now, and actually how similar some of the ways they live are. Especially with this farm [1850s America], this is where you see modern day is starting.

> Brian: Learn about daily life, what it was like for one family. Instead of focusing on grand themes in history, it's the gritty, everyday thing and what it was like to be a poorer farmer. You see all the component parts, and then you see them mesh together.

Like the other examples that follow, these statements identify "the daily life experiences of people who lived during a time in the past" as the educational goal. The statements of both Travis (an intern) and Brian (a part-time employee) contain the least amount of specific thematic description. They are also the two most recent hires, and work primarily on a single farm. All of the other interpreters have worked there longer and/or work at multiple farms on a more regular basis.

> Caleb: We're trying to introduce to family groups, their ancestry, or their interests in a hands-on way, so they learn through every sense they can about these different farms and how those cultures lived. So it makes a more indelible mark in their memory, by being able to touch and feel and work, and really get a sense of the life of these folks rather than just hearing their story.

> Stella: What life was like for those people at the time, why someone would leave and come to America, I think that's something we really try to make sure people get. I think they [the visitors] get an appreciation for what someone did a long time ago, what a child's life would be like then compared to theirs.

Caleb refers to multiple farms and stresses the hands-on nature of the museum experience, which is an operational detail, but does not mention emigration or the idea of blending. Stella additionally notes the theme of emigration but does not touch on blending.

> Corey: Simply, we want to show how life was back then. On the old world side, we're showing cultures, people in the valley, where they came from, in a sense. We want people to know how they were different, how they were alike, and so we're talking always about those things, we use a lot of contrasts and comparisons. And then, on the American side of the museum, we're showing how these cultures blended together, over time, how they settled here, what things they adapted to, and that's always changing since we're adding out there as well. With our Indian site coming on, we'll be talking about who was here.

> Alistair: Show the groups that first came over to the colonies to get a sense of who they really were, talk about the groups that aren't as well known or are sort of glossed over to the side, like the Africans. Part of our mission is to show the interaction that developed among all these groups in the New World, and it's not a pleasant, easy blending of cultures. It was interesting, complex scenarios which brought these groups together. They started borrowing from each other, which resulted in one of the many American cultures that formed.

> Grace: Help people understand the foundation of our culture through living history.

The majority of these statements identify "the daily life experiences of people who lived during a time in the past" as the educational goal. Corey's and Alistair's statements are the most similar to Daniel's although, as someone working at the farms on a daily basis, Corey includes some more specific details about the way in which interpreters communicate the information. Grace's statement is even more abstract than

Daniel's, though extremely pithy. By unpacking the ideas of "living history" as "people in costumes doing the daily work of the area and time and talking about it with visitors" and "the foundation of our culture" in the museum context of "people who came from specific places to the Valley of Virginia, all that they brought with them physically and socially, and what it became once they had been living together for awhile," Grace's statement has a lot in common to Corey's and Alistair's thoughts on the goals.

Desired Outcomes

A common understanding across the museum staff of the mission and the educational goals is important. In the absence of articulated outcomes, however, it would be difficult to know if the museum and its interpreters are meeting these goals when it comes to visitor experiences. In order to identify more concretely what a successful visit to the museum would look like, I asked Daniel for his perspective on the outcomes for family groups:

> Daniel: When they are finished, they understand what the museum is about, why it's called the Frontier Culture Museum, and a little bit more about their own origins, who they are as Americans. They have a sense of who they are. Hopefully they are coming away with a better understanding of how we got to be where we are.

This high level of synthesis is Daniel's personal goal for visitors to the museum. The institutional goal on the master plan, however, is something much more simplistic. That goal is the yardstick by which the administrators measure the museum's progress, and that plan indicates that the visitors should have a "pleasurable and informative experience." Elaborating further, Daniel suggests this means, "we just hope they take something away, that they've learned something, that they know more, maybe change the way they think about the past… we feel like that's good enough."

When asked to articulate the desired outcomes of a museum visit for family visitors, Corey and Brian, two costumed interpreters, shared the following:

> Corey: They don't have to take away everything we've told them, because they can't. We can't possibly know everything either. We've gotten them to ask questions about something they didn't know, and we've told them something they didn't know already. Parents are probably happy to see the kids tired, maybe a little dirty… If they're dirty it means they did something. Smiling, tired, and they want to come back and visit. Maybe they've spent a ton of time and want to see more. We want to make sure that people want to come back.
>
> Brian: They come away learning something new… maybe, especially on the African exhibit, seeing Igbo and Africans in a different light, maybe breaking stereotypes. People become authentically interested, or maybe we've ignited an interest, so they'll take it home and act on it.

Corey acknowledges the difficulty visitors have in retaining information presented to them in the museum, and suggests that he would consider asking a question and learning any one new thing as the hallmarks of successful visit. He goes on to distinguish specific parental goals, that they want their kids to have "done something" while visiting, beyond question asking and listening. He also recognizes the free-choice nature of the learning experience, and that repeat visitation is critical to the success of the museum. Brian also considers learning something new as key to a successful experience. He sees it as the museum's responsibility to provoke interest or start conversations on topics that are otherwise unfamiliar to museum visitors.

Both Corey's and Brian's perspectives on small, attainable successes mesh well with Daniel's elaboration on the museum's goals, but neither really addresses the high level synthesis in Daniel's personal vision. While there is some expected and noted variation, the upper level administration and the historic interpreters articulate a fairly

common understanding of the educational goals of the museum, as well as the desired outcomes for a family visit.

Learning Theory

No one learning theory, in particular, guides the museum's interpretation plan and, moreover, most museum staff members are not especially well-versed in formal learning theory. However unstated, the museum's general curriculum takes a pedagogical approach that is grounded in both social cognitive theory (Bandura, 1977) and either behaviorism (Watson, 1930) or constructivism (Piaget & Inhelder, 1972; Vygotsky, 1978), depending on how a costumed interpreter chooses to interact with visitors.

Modeling (Koran, Koran, Dierking, & Foster, 1988), based on social cognitive theory, is a key pedagogical approach at the museum. As a family moves from exhibit to exhibit, its interactions with historic interpreters at each stop serve as a model for how to act and interact with the next exhibit and subsequent costumed interpreters. If a visitor is given permission to touch an object at the first exhibit she visits, or is given a tool to use by a costumed interpreter early on in her experience, she will expect and make use of this way of interacting with the museum throughout her visit. Modeling also occurs among visiting families. A family that observes another group playing the ring toss game "quoits" at the English farm will likely try its hand at the game themselves. In this way, the museum's organizational intent is to use modeling as a way to achieve their educational goals.

In terms of how the organization intends historic interpreters to interact with the visitors, the approaches fall broadly into two categories. These are the transmission theory of communication, rooted in behaviorism, and the cultural theory of

communication rooted in constructivism (Hooper-Greenhill, 1999). When asked to describe how the historic interpreters achieve the institution's educational goals, Daniel shared:

> To the extent that they're scripted, we have what we want them to say. We want [the interpreters] to tell [the visitors] why this exhibit is at the museum, what's it about, how does it advance the narrative. [The interpreters] tell me they spend a lot of time listening, they hear [the visitors'] stories. And I'm good with that.

Organizationally speaking, there is a core body of information to convey to the visitors. This can be accomplished in a manner where the museum holds the locus of power and authority, or it can be achieved through conversation and a mutualistic sharing process. Daniel condones both of these theories in his description. In particular, if the visitors want to share their stories with a costumed interpreter, Daniel considers this constructivist practice to be aligned with the institutional goals. Since there is no organizational mandate for a particular type of learning theory, the on-the-ground interpretation is subject to the preference and abilities of the particular interpreter, as discussed in greater detail in Assertion 2.

Curriculum

In order to reach the visitors, the educational goals and big picture ideas must be translated into a specific and delineated curriculum. Some of the historic interpreters I worked with during this research were also members of the museum's education committee. Initially, it seemed this committee was responsible for establishing the content conveyed by the museum's staff. While the name might seem to suggest this, the committee is actually tasked with the creation and development of educational activities for the museum that pertain to school groups. This committee does not determine the

programming conducted by historic interpreters for the family groups I observed, as these groups are classified as casual visitors.

The more general programming for the public is established by the upper level administration, in consultation with historians and curators at the museum. It is then distilled, by the Director of Interpretation, from a highly academic reading list into a series of outlines and key points for every exhibit. This information then becomes part of a 3-ring binder for that particular exhibit, and is modified and updated periodically as new research is conducted or new information comes to light. This distillation is the "quick and dirty" for what all interpreters and volunteers need to know, at a minimum, to work at a particular farm. In addition to the key points in the binder, the core curriculum also includes basic principles that apply to all of the farms. According to Alistair, who has supervisory responsibilities, these include "being nice, friendly, smile, answer the questions, be attentive to what [the visitor] needs" as well as "not making stuff up. We say when we don't know something; we're very good at that."

The process for training new interpreters, whether volunteer or paid, includes a full museum tour, so that new hires can experience the museum from the visitor's perspective and interact with the other interpreters as a visitor would. After the initial tour, the new interpreters spend a week or so reading all about the museum and how the exhibit they are training to work at fits in with the museum narrative, and studies the information in the binder for that exhibit. During this time, a costume is made for them, if they will wear one, and they also begin spending a few hours at each exhibit listening, watching, and learning about the day-to-day responsibilities on the farm, like feeding the animals.

Once they've apprenticed with seasoned veterans at the exhibit for a while, have the daily routines of the farm down, and have begun to learn some crafts and skills, new interpreters start talking with the visitors. Museum administrators observe them to see how they are doing, and if their performance is satisfactory they begin wearing their costume at the exhibit. Shortly thereafter, according to Daniel, "we leave them alone. We leave them alone to their own devices."

Once they are on the farms, individual interpreters have a fair bit of latitude. Alistair concedes, "I don't know what they're saying on the other farms. It's hard to say." Daniel adds that he periodically shows up at the various exhibits, but when he is present every staff member "behaves like the perfect interpreter, otherwise they're not very bright."

According to Corey, however, variety is key to good interpretation. Different interpreters get interested in particular areas of a farm and tend to go deeper into that aspect with their interpretation. They gravitate towards what they are good at, and talk about a variety of different facets of foodways or fence building to keep their interpretation fresh. As a result:

> Corey: If you went to the same farm every day, and had three different people working on it each day, you are going to get a different interpretation. It should match, as far as basics are concerned… hopefully nobody is saying wrong things. But they might not talk about the press cupboard over there but they might talk a lot about the spinning wheel over here. So you might not get 100%, because you can't, but you'll definitely get something different each time around. And even from interpreter to interpreter, I try to do it even within a day. Because if you keep talking about the one thing, you are going to get bored with it, and you are just going to get annoyed.

Similarly, Stella shares that when talking to visitors, "you don't always say the same thing because you are not a tape machine. You say different things." Both Corey and

Stella report that interpretation necessitates variation. Corey fears boredom with the same rote recitation of information, while Stella feels too much repetition renders interpretation mechanical. While this is not at odds with the institutional goals, it does set up a space for conflict if the variety in material deviates too far from the core curriculum.

The museum has well-defined educational goals and a centralized curriculum for the farms, but the on-the-ground reality is that there is little institutional accountability and interpreters have a lot of leeway in what they present to the visitors. This can be both positive and negative for the visitors, depending on how an interpreter makes use of that leeway, and how the visiting experience unfolds, based on interpretation style. I address this in the next assertion.

Summary of Assertion 1

The museum's institutional educational goal is for family groups to learn about the daily life experiences of people who lived during a time in the past. This is accomplished by translating the museum's narrative and the desired outcomes for family groups into a curriculum for each farm exhibit. The resulting curriculum is enacted with a fair amount of latitude and variety by costumed interpreters at the various farm sites, and presented to visitors through the use of multiple, though not directly specified, learning theories.

Assertion 2

Historic interpreters believe they are educators, but that visitor learning involves education and entertainment. They strive to balance those tensions in their interactions with families.

Beliefs about the Job

In order to understand the historic interpreters' beliefs about visitor learning, it is important to explore their personal beliefs about the job they do at the museum. Their understanding influences how they engage family groups, interact with visitors, and how they balance the twin goals of "pleasurable" and "informative" in a free-choice learning environment.

What do you do?

Some of the interpreters, like Corey, label themselves explicitly and simply: "We are essentially educators." Others use the term interpreter or historical interpreter, but they all mention concepts such as "learning," "explaining," "teaching," "educating," "demonstrating," and "showing" when describing what they do. The following interview excerpts show in more detail how a few of the interpreters see themselves and their work:

> Alistair: Most of the time I tell them I'm a museum educator, because it's a lot easier than saying interpreter, because people think of that as someone who interprets [languages], or historic interpreter, they don't really get that. But if you say museum educator, it means you work in a museum, and you're educating people.
>
> JMBC: And so you see yourself as an educator as well, or is that just easier to tell people?
>
> Alistair: No, I see myself as an educator, I think that's what we're doing.

Initially, Alistair identifies himself as a museum educator as a matter of linguistic convenience. He describes how the term "interpreter," which is his official title, is confusing for many people, and that clarifying it with the prefix "historic" does not yield better understanding. He then asserts that he identifies as an educator, not just for convenience but because he believes that is what his role is in the museum environment.

In contrast, Brian does use the term "interpreter" when he explains to people what he does at his job.

> Brian: I tell people I'm an interpreter, and they say, "Oh, what do you interpret? Oh, like Scottish or something like that, you know, or like German?" I say, "No, uh, I work at a museum and I'll take an exhibit, I'll break it down into its component parts, explain the gist of it, what you should be learning, what you should be drawing from what you see at the exhibit."
>
> JMBC: Do people think that's weird? Like they never heard of that job before?
>
> Brian: A lot of times they'll say, "Oh, you're a tour guide" and [laugh] I say, "You know, it's a little bit different, I don't take you around and explain *everything* to you, it's more of a dialogue."

Brian describes why the museum staff members who do the job he does are known as interpreters. He makes a point to distinguish the interpretation of a language from the interpretation of an exhibit, though in both cases a person is effectively translating. In Brian's case, he is translating the information contained in the exhibit that visitors might not understand in his absence. He does not call himself an educator, but does use the word "learn" when referring to what visitors do at the museum. He also makes the point that interpreters are stationed at a particular exhibit, and do not go with the visitors from place to place. His final statement suggests he interacts with visitors in a dialogue about the exhibit. This expresses his ideal situation for interpretation, though a dialogue may not always be possible or even desired by the visiting family group. In particular, the dialogue ends up more like a lecture when there are many groups visiting simultaneously.

What skills does it take?

When asked what skills it takes to do the job they do, most interpreters identified a love of people, a love of talking, and love of history as prerequisites. Many of the

interpreters have a background of formal training in History or Education, and most interpreters believe that does help them do their job, but that it is possible to gain the knowledge, the skills, and the strategies for talking with people, on the job. In addition to loving to talk with people, Stella shares "lots of times we're learning from visitors, exchanging information, or just listening to the stories they want to tell." Other interpreters suggest required skills include being able to think on your feet, being able to relate to a large variety of audiences, being able to "read" people, and being prepared to never be surprised, because there is no such thing as a "typical day" at the museum.

Beliefs about Visitor Learning

As discussed in Assertion 1, historic interpreters at the museum learn through extensive reading as well as listening in while other interpreters talk with visitors. Historic crafts and skills are typically learned through apprenticeship on the farms with seasoned veterans. This speaks to historic interpreters' beliefs about their own learning, but how do interpreters believe the visitors, particularly family groups, learn from their museum experience? When asked to describe how families learn in the museum, the interpreters had a range of responses. Travis, the intern, identified two basic modes:

> Travis: Every family has their own personality, basically, and some of them are better than others [at] interacting with people. It's more fun when you have a group that likes to talk, that's outgoing, and they'll start the talk with you. Then you have ones that are laidback and they don't want to talk so much, they want to hear, so you just go on and get to tell them everything.

In the previous quote, Travis mentions families who talk and families who listen. He neglects any mention of hands-on activities or specific engagement strategies, and seems to have the idea that as long as the interpreter gets to tell the family some information, the family will have an opportunity to learn. This idea contradicts what most other

interpreters will say, which is that they believe learning has a substantial experiential component.

In his interview, Caleb remarked that he tries to "hit the senses a lot" when interacting with family groups. Caleb supposes that parents will refer back to the museum visit, asking the children questions like "remember how you helped muck out a cow stall on the Irish farm? Remember how bad it smelled?" He finds that if he can tap into a child's sense of "tired feeling, or sweating, or smell, or touch, that will stick much better than telling them information." Grace also shared her belief that "kids will retain more of what they learn if they actually have hands-on [experiences], get real dirty, they smell things, they touch things." Both interpreters agree that smelling, touching and getting dirty lead to better memories from the visit. This understanding aligns with Assertion 4, that families believe the multisensory encounters at the museum let them experience history up close.

Having only worked at the museum for two years now, Brian shares a highly detailed recipe for a family's learning experience. He begins by asserting that "you can't teach them everything, and you can't just give them all the facts you know." Families "get what they put into it" at a living history museum. As an interpreter, it is your job to "get them involved. You don't want to bore them, you don't want to overload them with information, and you don't want to be too passive." Brian advises, "You have to be selective in your presentation and cater to what they want."

Historic interpreters identify talking with visitors and facilitating hands-on experiences for visitors as the ways in which they contribute to visitor learning in the museum. More experienced interpreters, like Grace and Caleb, stress hands-on activities,

particularly for family groups, while Travis and Brian identify the teaching role they assume when interacting with families. Brian does also note that the key is to get families involved. Historic interpreters facilitate family involvement through a mix of talking and doing, and a mix of education and entertainment, as discussed in the next section.

Education and Entertainment

As Brian suggested in the previous interview excerpts, he believes visitors come to an exhibit looking for a specific kind of experience, be it informational, pleasurable, or a mix of the two. Sometimes visiting families just want to take a quick look around and visit with the animals, other times they want to stay and chat for upwards of an hour at each farm. What are interpreters' beliefs about the balance, at a free-choice learning institution, between being educational and being entertaining?

When asked about the institutional perspective, Daniel, the upper level administrator, expressed a tension between education and entertainment as evidenced by the following interview excerpt:

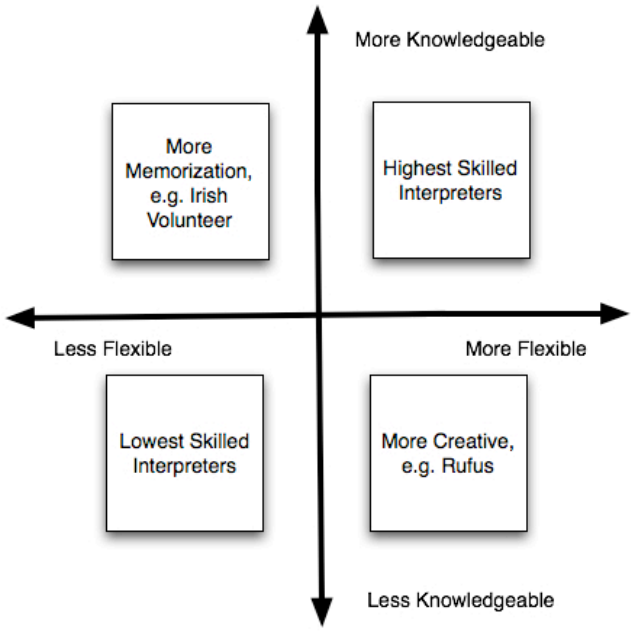
> JMBC: Institutionally speaking, which is more important – a positive experience, or the history and the education?
>
> Daniel: It's hard. I'm sure you've encountered this kind of thinking, but, you don't want to "ram" things down people's throats…
>
> JMBC: Since they're choosing to be here?
>
> Daniel: Right. And with a museum like this, this category of museum, they've always got to contend with, "This is a tourist attraction." "No, this is an educational institution." "No, this is a tourist attraction."

Daniel is expressing, at a more abstract level, the education-entertainment tension. Instead of addressing it, as historic interpreters must do, on a per family and per exhibit basis, Daniel sees the whole of the museum's existence framed in a debate over whether

to privilege the educational goals, making a visit a more informative experience, or the entertainment goals, making it a more pleasurable experience. The former is truer to the museum's mission, but as Daniel admits, "this place won't survive unless people come here." Much as the variation in presentation of the overall curriculum falls to the historic interpreter's discretion, interpreters are also responsible for a family's impression of the museum in terms of meeting their needs and interests.

Interpretation Styles

Figure 1: Interpretation Styles in a Living History Museum



Broadly speaking, interpreters can be more or less knowledgeable, and their presentation style can be more or less flexible, as shown above in Figure 1.

These are not static qualities, however, and factors like how many other people are working at that farm, or how crowded the museum is that day, can also influence the interpretive presentation. Large crowds of visitors, for instance, can cause an otherwise flexible and dynamic interpreter to fall back on a large group lecture scenario in order to

get a wide net of information out to the most people. Conversely, even a fairly inflexible interpreter might attempt a novel interaction if there are very few visitors that day and he has become bored with house chores while waiting for someone to come in and talk to him.

In the case of knowledge, more knowledgeable interpreters can answer questions, offer commentary, and connect ideas on a much larger set of topics, or demonstrate more skills than their less expert counterparts. However, even newer interpreters or volunteers who are less knowledgeable have areas of personal interest about which they are better informed. In addition, according to several interpreters I interviewed, a big part of their job can be listening to visitors' stories about their own lives and experiences. This aspect may require people skills, but does not require broad or deep knowledge.

In order to demonstrate how a relatively novice interpreter can make a big impression by engaging a family group, I present the following vignette. This vignette illustrates a learning experience facilitated by a recently hired interpreter named Rufus, and Michelle, her daughter Darby, and Darby's grandparents. This is an example of flexible presentation where the depth of required knowledge is fairly small.

Vignette 1

Darby leads Michelle into the kitchen. There are small wooden bowls arranged on a wooden table. Each bowl contains a different food or a bunch of herbs. Darby points to one bowl, and says to her mom, "Hey, look, there are some eggs," as the interpreter, Rufus, walks up behind them.

"Yes, yes they are, and they are real, too," says Rufus. "We collect them from the chickens every morning."

Darby turns around, a bit surprised to hear a voice she does not recognize, and sees a man wearing a museum logo polo shirt. A picture ID that demonstrates he works

as an interpreter is also visible, clipped to his belt. After a moment of sizing him up, Darby says to Rufus, "I have cousins that keep chickens." Rufus smiles.

Michelle points to a wooden bowl that contains greenish colored round balls, with faint white lines running down the sides of each globe. "I don't recognize those," she says, "over there, they kind of look like grapes or tomatoes, but not. Do you know what that is?"

"Those are gooseberries. We grow them in the garden."

"Gooseberries? I don't think I've ever had a gooseberry before."

Rufus offers to take Michelle and her family on a tour of the garden, where he promises they can go look for the gooseberries. Rufus leads the way as Darby, Michelle, and then the grandparents follow him out of the house, down the steps, through the barn and out into a medium-sized fenced-in garden. The garden is laid out in rows, and as Rufus walks up and down the rows he points to the various crops. He stops in front of one plant and says, "This is a walking onion. Any guesses why it's called that?"

After a pause, Michelle looks at Rufus and says, "I thought we were going to find the gooseberries."

Rufus smacks his hand to his head and says, "Oh, right, of course, I forgot, sorry. Now, where are they again? Can you help me look?"

Darby giggles as she walks around looking at various plants. Michelle wonders, "What kind of plant is it? Is it a tree? A bush? Do they grow on the ground? Where are we looking?"

Rufus doesn't respond, but walks through the garden, looking all over as if he's lost something. He can be heard quietly muttering under his breath, but no one can really hear what he's saying. Darby leads her grandmother over towards a bush at one corner of the garden, and starts combing through it with her fingers. She calls out, "Mom!"

In another corner of the garden, Michelle has found a bush, but upon hearing her daughter call she turns to look for Darby and says, "Baby?"

"I think I found it," Darby says, "Look!"

"Same thing over here," Michelle calls back to her.

Rufus walks over to Michelle and says, "Yes, that's it there. Thank you for helping me find it."

Michelle replies, "So it grows in a bush, then."

Darby and her grandmother have gathered around the bush Rufus and Michelle are standing next to. Rufus picks a few gooseberries and hands some to Michelle, and some to Darby. Darby passes on her gooseberries to her grandmother, who in turn gives one to the grandfather to try. Michelle offers me one of her berries. She bites into it slowly, with a look of concern, but after a few seconds pops the rest in her mouth and says, "Wow, that's not bad. A bit sour but kind of sweet, too."

In this vignette, Rufus displays flexibility is his interpretation in several ways. He begins by meeting the family, physically and conversationally, where they are already at in the house. Darby and Michelle are exploring the kitchen and talking about the eggs they find when Rufus walks up behind them and engages them by adding to the conversation already underway. Michelle asks a question, not recognizing the green globes sitting in the bowl. Rufus identifies them for her, then goes a step further to add that they are grown in the garden at the farm. When Michelle states she's never had gooseberries before, instead of just telling her more about gooseberries, or changing the subject altogether and talking more about the house or the curriculum for the German farm, Rufus makes an impromptu decision to lead the family out to the garden to see the gooseberries growing.

When they get to the garden, instead of immediately showing them to the gooseberry bush, Rufus takes them on a circuitous route through the rows pointing out other vegetables. When Michelle reminds him of their original intention, he melodramatically plays as if he's forgotten the reason they were there, and then asks for their help in finding the berries. Instead of just showing the berries to the family, he's made it into a family group challenge to find them, using his forgetfulness as a ploy to get them looking for themselves. Darby finds his absentmindedness charming and laughs,

and this sets her more at ease. Rufus also lets them eat what they find, which makes the experience more personal and rewarding, as well. Michelle specifically mentioned the gooseberry hunt and how surprising it was to taste one during her post-visit interview.

This type of flexible interaction takes little knowledge above and beyond the standard curriculum, however it does take some understanding of interpersonal dynamics. Rufus' judgment to pursue a question out into the garden and then turn an instance of showing into an instance of collaborative discovery made this a very valuable interpretive experience for the Whitaker family.

Reading the Visitors

At a minimum, historic interpreters are trained to give a basic account of the farm they work at, including information about trades, daily chores, foodways, social customs, and reasons for emigration. As interpreters become more familiar with the museum, work with other interpreters, or read more about topics of interest, they are able to customize their presentation to the audience's interest. Part of this customization process involves "reading" the family groups.

For example, Alistair, who has been working at the museum for twenty years and is a seasoned veteran, takes about a three second gut reaction to size up a family and decide if they're going to be interested in talking to him or not. Brian is much newer and has concrete rules he uses to decide on how to approach visitors, such as "If they read the interpretive sign at the entrance of the exhibit, don't worry about them so much, they'll ask if they want to know something else" or "If they say hi to you but don't seek you out, they probably want the bare minimum." Corey is always ready for anyone, explaining, "You don't know if you are going to be talking to your average American Joe or a

college professor, or someone who speaks German, and, you know, those are difficult." Historic interpreters use different techniques for gauging initial interest from visitors, but in all cases it is with the goal of making the initial interpretation most relevant for the visitors.

Initial engagement is not the only opportunity for interpreters to read the visitors. While an interpreter is talking with a family group, they also look for signs of engagement from the visitors. Travis knows a visitor is getting it, because "…you'll see their face light up, and they'll say, 'Oh, wow, yeah!'" Stella judges if she should give the family members more information based on their physical reaction:

> Stella: You can tell they want to move [on to something else], as opposed to people who want more. You take a breath to stop, and they look at you like they want more, because they are still standing there and not moving. You've given them an opportunity to go somewhere else and they are staying put, so… you tell them something else, or ask them a question.

Travis looks for understanding as he talks to the visitors, to make sure they are getting what he's saying, while Stella gauges the interest level on a running basis, giving visitors opportunities to politely go on to the next room or the next farm if they've had enough of her interpretation.

Brian makes a point of talking to the visitors about things outside of the museum, like where they are from or about their vacation. In the following example he recounts how this casual conversation helps him tailor his message:

> Brian: This family I saw today, they told me they were going to visit the World's Wackiest House, but it was closed, so they came to the museum instead. I figured if the family considered both activities to be similar in some way, they are probably looking for a more… well, as an interpreter you know what they are looking for.

Brian is also aware that the religious and political beliefs of visitors affect their museum experience, and so, in addition to reading the visitor's interest, he gauges their politics. He looks for "something appropriate and interesting to talk about – interesting and informative without offending them. If they seem more conservative, I won't push the polygamy so much. I'll talk about family lineage rather than multiple wives." Brian works almost exclusively on the West African farm. As such, he is initially particularly sensitive to visitor beliefs because the West African exhibit tends to generate the most controversy. This is likely due to its representation of involuntary emigration and the fact the exhibit represents a culture that is considerably different from the ones most visitors are more familiar with. There is also the possibility that visitors unfamiliar with the museum's narrative are unsure of how the exhibit fits into the larger picture.

While all of the interpreters that were interviewed engage in the process of "reading" the visitor, some of the ones who were observed interacting with family groups do not, or are less skilled in this area. Many of these people are volunteers who only work once a week and have much more limited knowledge of the subject area, making a nuanced and dynamic interpretation very difficult and unlikely. Another exception to this practice occurs when a single interpreter must talk to many groups of visitors simultaneously. While the interpreter might be able to quickly size up some of the visitors, it is difficult to meet the interests and needs of a diverse group with a single interpretive presentation or discussion.

Finding the Balance

Historic interpreters believe their interactions with family groups should find a balance that allows each family member to get something beneficial out of the visit. From

the very youngest visitors, who might only be interested in visiting with the animals, to the grandparents, who reminisce about visiting their own grandparents' farms, interpretation should be a balance between education and entertainment, talking and doing, and asking and answering questions.

In the following interview excerpt, Stella describes her approach to working with family groups. "I want to give them information," she shares, "but then I try to think of something that the kids can do, to hold their interest." She tends to "gear things towards the kids, unless the parents indicate otherwise" and to do this she will "…ask if they want to play detective and find the bathroom upstairs. I give them a mission, and later they come downstairs and tell me. They like reporting back to you." She also expressed having a difficult time with some hands-on elements.

> Stella: Sewing and cleaning the house are hard to engage the public with, but I'll say to the kids, "Do you want to see what our broom looks like? Does it look like the one you have at home? Would you like to help me sweep?"

Stella's strategy for balance is to offer up interpretation targeted at the variety of levels present in a family group. She gives information to the parents while giving the children a mission, therefore giving everyone something to take away with them.

Brian looks for a balance between information and activities as well when interacting with family groups.

> Brian: Especially if they ask a question, I like to answer it back with a question as well – "What do you think this is for?" Typically I'm trying to get them to figure out the functions of things, and get them to be imaginative. When kids get antsy I think, ok, time for hands-on. I'll have them help me patch mud, repair roofs, and I've had them help build the outdoor kitchen.

Brian approaches the balance more holistically, using questions to promote thinking in both kids and adults, and then moving along to hands-on activities when the kids are no longer interested in discussing or learning about objects through talking.

Other historic interpreters interviewed have their own ways of finding a balance in terms of visitor engagement, but, as discussed previously, many of the ideas expressed by the interpreters pertain to the interactions with a single family at a time. When interpreters must interact with large and diverse groups of visitors, it is nearly impossible to do many of the things they describe in their interactions with individual families. Based on observations of these situations, most interpreters fall back on a standard lecture about the farm and hope each visitor will find something personally interesting. Ultimately, the aim of the interpreters is to engage and educate the family groups they interact with, and to do their best to ensure the families have a good experience so they want to return to the museum.

Summary of Assertion 2

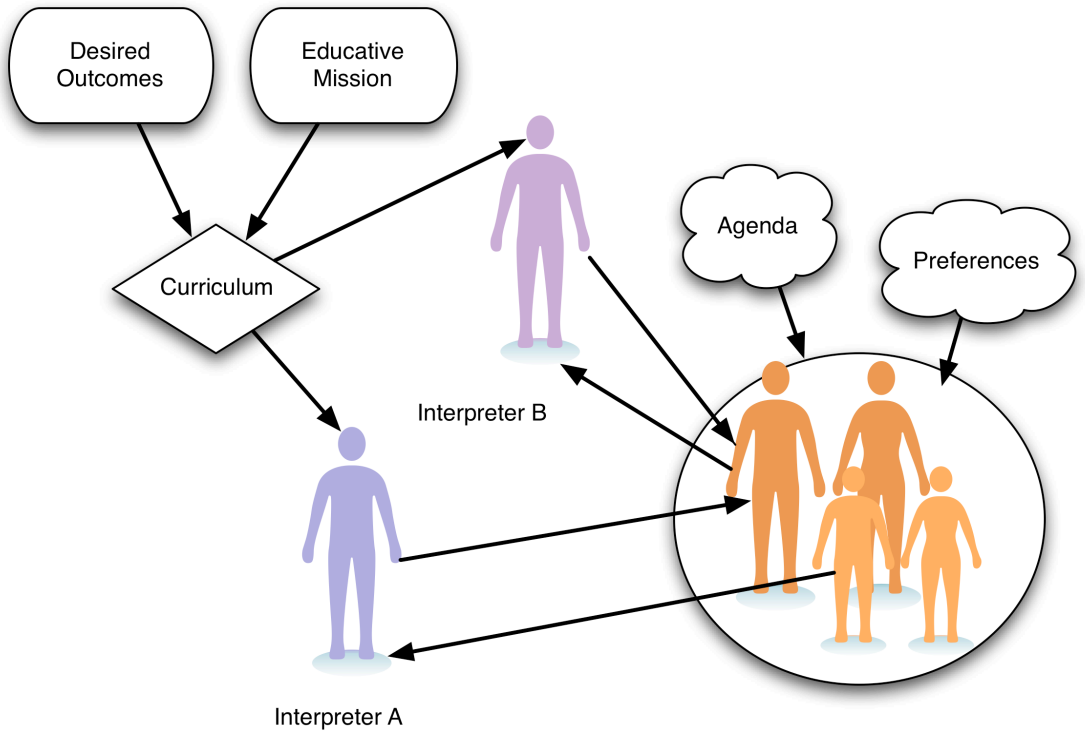
Historic interpreters identify themselves as educators, and believe that to do their job requires both a love of history and of talking with people. They believe that visitor learning involves a combination of talking and doing, and that they must strike a balance of education and entertainment in their interpretation. They also believe that families, in particular, are concerned with their children both learning facts and doing tasks during their museum visit. A specific interpreter's portrayal is dependent on her individual knowledge and flexibility with engagement strategies. Interpreters use a variety of strategies to engage family groups, and try their best to meet families' needs by way of "reading" the visitors.

Assertion 3

Family learning experiences are the interactions of the museum's narrative as portrayed by the historic interpreters combined with the family's own agenda and preference for visitation style.

Family learning in a living history museum is a complex process that involves interactions beyond just the family and the historic interpreter. The museum's institutional goals are internalized and operationalized differentially based on a particular interpreter's own training, style, and preferences. On the museum grounds, the museum narrative, via the particular interpreter, meets the visiting family. The family brings with it a particular agenda for the museum visit, as well as generally unspoken preferences for the types of interactions they expect and would like to experience during their trip. The family's learning experience lies at the intersection of these intentions.

Figure 2: Learning Experiences of Families in a Living History Museum



Family Agendas and Preferences

The interpretive style and engagement strategies used to portray the museum's narrative (as discussed in Assertion 2) are only half of the equation; family groups also bring their own agendas and preferences to the museum. The family agendas for this inquiry included: a convenient and interesting leg stretching break from a long car ride; showing the rest of the family a place once enjoyed by a single family member, since it fit nicely as a break on a road trip; an excursion to see the museum as well as a cousin who works as a summer intern; a daytrip to amuse the family over summer break; and a homeschool outing. More generally, the family agendas were either geared towards entertainment and leisure or geared towards education.

While the family agenda drives the overall visit, family preferences for interpretive style, and whether to interact with an interpreter at all, also influence the living history museum learning experience. As shown in the examples that follow, a family with a leisure agenda may be more interested in exploration than talking with historic interpreters, however a particularly flexible and knowledgeable interpreter might override this preference and engage a family, despite their lack of initial interest. However, a family might also have such a strong desire to interact with historic interpreters that they will engage with whomever at every exhibit, but will later express strong preferences for particular interpreters or styles.

Taken as a whole, all families engage in a range of interactions with historic interpreters. The following table shows the degree of interactions between families and interpreters based on the amount of time spent with an interpreter at an exhibit, compared to the amount of time spent at the exhibit on a whole, as well as the overall engagement

of the families based on observable actions, types of questions, length of discussion, and the variety of topics covered.

Table 3: Family Interactions with Historic Interpreters

	W. Africa	England	The Forge	Ireland	Germany	1820s	1850s
Whitaker	**	***	**	**	***	*	*
Landry	*	–	n/i	*	**	–	*
Cole	*	***	*	*	**	?	?
Olsen	–	**	**	***	*	n/i	**
Segal	**	***	*	–	*	***	*
Vermaark	***	**	**	**	***	*	**

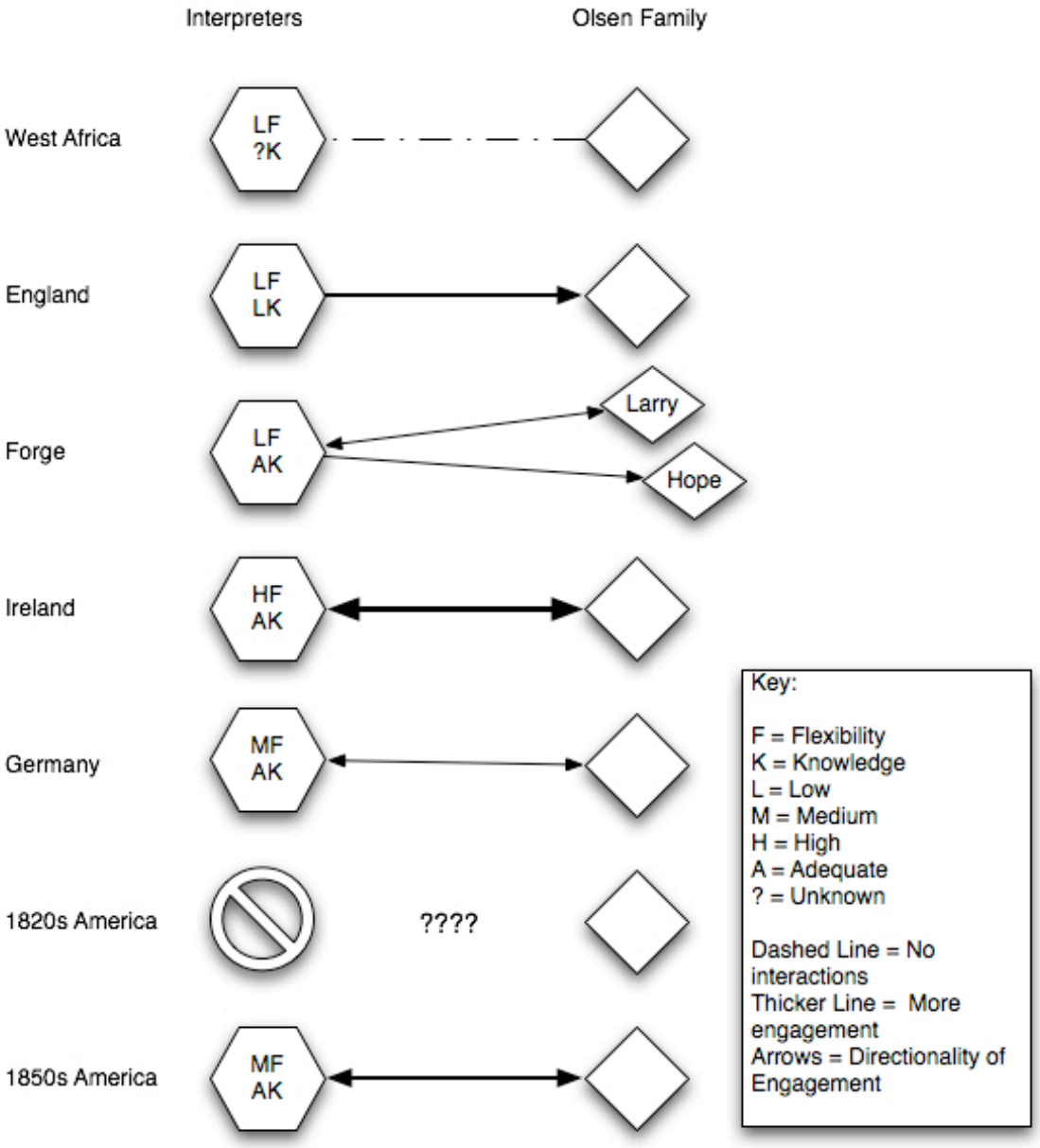
– = no interaction, * = minimal interaction, ** = medium interaction, *** = maximal interaction, n/i = no interpreter present, ? = not observed

The Olsen Family

The Olsen family came to the museum with a strongly leisure-oriented agenda. Ellen was looking for a way to occupy her ten-year-old son Larry and her nine-year-old daughter Hope during their summer vacation. They enjoy hands-on activities and had visited a number of historical sites, such as Historic New Market, during the earlier part of the summer. What follows is a diagram and then a brief description of the overall character of their interactions with historic interpreters at each of the museum exhibits that they visited.

In the diagram below, the interactions between the Olsen family and the costumed interpreter at each farm are represented in pictographic form. The thickness of the lines represents the degree of engagement, and the arrows represent the directionality of the engagement. A dashed line shows no interactions, while the question marks for the 1820s exhibit represent the absences of a costumed interpreter. At the Forge exhibit, the engagement of the two children varied, so they are represented separately.

Figure 3: The Olsen Family Visit



West Africa. In West Africa, when given the choice, by Ellen, to stay and listen to Brian's interpretation, which was a discussion already underway with several other visitors, the kids chose to explore on their own. They walked right through the room Brian was talking in, and then proceeded to explore the rest of the farm without interacting with an interpreter. They picked up tools and imagined what they would be

used for, tried their hand at weeding the garden with some tools lying out in the middle of it, and admired some of the furnishings in the houses.

While the children didn't listen long enough to gauge Brian's depth of knowledge, and regardless of Brian's potential for flexibility, the type of interpretation he was engaged in was static and already in progress. This presentation did not hold any appeal for the children, so they moved on. Ellen did pause a bit longer and listen to Brian from the next room in the two-room man's house, but she also did not stay very long.

England. The next house was the English farm. The family immediately went upstairs to the bedrooms upon entering the house, continuing on their own agenda of exploration. While upstairs, a female interpreter asked if they had any questions and, when they did not, the interpreter began talking with some other visitors. Hope was digging through a chest, and found a tool neither she nor her mom could identify. Her mom prompted her to ask the interpreter, who was still talking with another group. The interpreter took the tool from Hope, looked at it and nodded, and, while continuing her discussion with the other visiting group, walked over to the chest Hope had taken it from, and put the tool back away.

This interaction, followed by a lecture in the parlor, that the kids weren't interested in but did sit still through, and then the interpreter's somewhat flippant response of "I'm not really sure what all that's about" when asked about a thorny wreath in the kitchen, seemed to sour the family on talking to interpreters. Ellen commented, as they left the house, that the interpreter didn't seem to know what to do with the kids, and that she also didn't seem to care much about what she was doing, either. In her follow-up

weeks later, Hope recalled specifically “when I found the tool in the box and the girl didn't know what it was.”

Irish Forge. It is impossible to visit the Forge, when staffed by a blacksmith, and not at least superficially interact with an historic interpreter. In the case of the Olsen family’s visit, Larry was engaged with the process of forging. He seemed to really like it, leaning in close, staring intently, and smiling broadly as the blacksmith worked. Larry relished touching the nail and the hook the blacksmith gave to him to examine once he had finished making them. In contrast, Hope crouched down on one end of the shop, not looking at anything going on with the blacksmith, but rather towards the wall of things that had been made in the Forge. As we left the Forge, Ellen commented that from previous visits she knew that Larry liked interacting with the Blacksmith and Hope didn’t, so she did her best to facilitate both kids getting what they want out of the interaction, because “Larry would stay all day and Hope wouldn’t even stop here if they each had their own way.” Due to the nature of the exhibit and the work, most of the blacksmiths are very knowledgeable. In addition, regardless of their flexibility of interpretation style at the other exhibits they work at, they are tied to a particular type of demonstration while in the Forge.

Ireland. By the time they reached the Irish farm, the Olsen family had fallen into a pattern of discovery and exploration largely excluding interpreter interactions. They visited with the pigs outside, fed the chickens with fowl food they had purchased at the ticket counter, and peeked in on the various Irish outbuildings. After having exhausted all areas of exploration within view, Hope suggested to her mom that they go inside.

The kids began to look around the house on their own, and seemed surprised to find there was an older male interpreter with a bushy grey beard sitting at the loom in the room next door. Billy smiled warmly but did not get up. “Welcome to the Irish farm,” he greeted the family in a calm and relaxed manner. Billy then asked them, “A trick question. Are you wearing anything that is woven?” and let them talk about it together and with him for a bit before he showed them how the loom worked, let the kids take a turn with the shuttle and the pedals, and then posed to them the problem of what happened when he didn’t use the pedals of the loom. He next talked about which sibling would sleep in which bed (for a more in-depth discussion of this interaction, see Assertion 6), which led into further house exploration, led by the kids while also interpreted by Billy.

Despite their intentions to explore independently, Billy was able to capture the children’s attention by involving them in a weaving demonstration, having them solve a problem as to how the loom worked, asking them questions, and relating the beds to their experience as siblings. He demonstrates extensive knowledge in that weaving is a skill beyond the core curriculum at the museum. He also shows flexibility in his interpretation, in his initial choice to bring the kids into a discussion of something tangible like the loom, and the way he introduced and explored its use. Once he had engaged the children, he moved on to helping them understand other objects in the house, and connected these to historical facts.

Germany. At the German farm, the Olsen family continued visiting, for the most part, on their own. When they entered, Rufus was already talking to some other museum visitors, and they listened in for a minute before Hope moved past the room, found an

entryway with a bench and a few pairs of wooden clogs, and proceeded to try them on. Larry noticed some eggs in the kitchen, and commented that they have chickens at home. Rufus came up behind him and said, “Oh, you do? So do we!” Larry asked Rufus where the kids would sleep, and was told “upstairs, but it’s not open for you to see, sorry.” The kids soon headed outside, and when Hope had a question about one of the flax tools in the barn, Ellen ended up asking a female teen interpreter for her, as Hope appeared to have suddenly grown shy. Their interactions were quite brief, but Rufus displayed flexibility in his approach to Larry, and Larry was able to get his question answered.

1820s America. There were no historic interpreters present when the family visited this house, so there were no opportunities for interaction. The family quickly toured the house on their own, and then discovered the cache of old time games on the back porch. They spent the bulk of their time on this farm playing games outside.

1850s America. The family entered the house on the parlor side, and just as they did in England, they continued upstairs, Hope leading the way, before talking to anyone. After some exploration upstairs, the family came back downstairs together and made their way to the kitchen, where a male historic interpreter sat, sewing. Hope sat next to the interpreter while he attempted to engage the family in a discussion of social roles of seamstresses and tailors, and what appropriate clothing would be like in 1850s America. Hope lost interest and wandered off to examine kitchen utensils and gadgets, but Larry and Ellen were still listening. The interpreter changed strategies and asked for questions, but no one had any, so he changed again and posed a question to the family, asking them when “dinnertime” would be. This worked to bring Hope back over to the rest of the group for a discussion of meals and food, and then the interpreter walked with the family

as they went and toured the downstairs of the house again, answering a few questions from both Hope and Larry as they looked around.

The interpreter, in this instance, began with a fairly standard description of what he was doing, but quickly realized that he was missing his target with the family when Hope wandered away. He demonstrated flexibility by rapidly changing strategies until he arrived on one that would bring Hope back in, and then toured with the family for the remainder of their visit. He showed himself to be knowledgeable in answering the few questions the kids posed to him, but none of the ideas touched upon by the kids were particularly outside the standard curriculum.

While members of the Olsen family interacted with a number of interpreters at the various farms, the only one they seemed to really engage with was Billy at the Irish farm. Though the interpreter at the 1850s farm did manage to hold their collective attention for a small amount of time, they did not mention their interactions with him in any of the follow-up interviews.

The Vermaark Family

In contrast to the Olsens, the Vermaark family came to the museum with a primarily educative agenda. Zoe, a single mother, homeschools her sixteen-year-old daughter Harper. The pair had visited the museum several times before, though they have not been there since the West African exhibit was added. They are seasoned museum visitors, having mentioned no less then twenty other museums, when prompted to discuss their use of museums during their pre-visit interview.

From my observations of their visit, they spent unusually long periods of time interacting with historic interpreters at every exhibit. While it seemed their level of

engagement varied slightly, based on observable factors like number of questions, restlessness, yawning, or lack of eye contact, they seemed somewhere between engaged to extremely engaged at every house. The interpreters' knowledge and flexibility varied greatly during their visit, however, with Brian in West Africa displaying deep and broad knowledge and some flexibility, while the volunteer interpreter in Ireland was unable to answer something if it was out of the scope of the binder for the exhibit, and displayed very little flexibility in his interpretation style.

At the time of their visit, from externally observable cues, it would be very hard to distinguish between their experience of interpretation they deeply connected with and their experience of interpretation they listened to because that is what was available to them at the time. In the post-visit interview and in the weeks later follow-up, however, both Zoe and Harper described how their experiences differed across the farms, as evidenced by the following interview excerpts:

> Zoe: The first docent at the African village, he was just SO impressive. I really enjoyed that experience.
>
> JMBC: Is there something in particular you enjoyed about it?
>
> Zoe: It was a combination of him being incredibly knowledgeable and being present to what my needs were, what my questions were.

Zoe identifies the degree to which Brian displayed both knowledge and flexibility as the key to what made her visit to the African farm particularly memorable and pleasurable. Conversely, in regard to the volunteer at the Irish farm, Harper notes what she found lacking:

> Harper: [The interpreter at the Irish Farm] knew what he was talking about, but he didn't know how to have a conversation about it, he just knew how to tell you about it. It's sort of like a book, you can sit down and read it, but if you have a conversation then you learn about

> specifically what you want to know. I feel like that is more valuable than just being told what other people think is important for you to learn.

Zoe added, "I didn't need to come here to get that experience, I could just watch a DVD."

Despite their frequent neutral expressions and polite demeanor during the museum visit as a whole, both Harper and Zoe experienced considerable variation in their engagement, interest, and enjoyment of their interactions with historic interpreters. Zoe identifies the quality of being aware of her needs and questions while Harper makes a distinction between "telling you about it" and "having a conversation about it." In both cases, the underlying commonality is the joint ownership of the dialogue. On the Irish farm, Zoe still asked questions and the volunteer interpreter answered them to the best of his ability, but her questions did not alter the direction of his interpretation in any way, and her attempts to direct the presentation towards another aspect of Irish culture were ignored. This is in stark contrast to the 75 minutes Zoe and Harper spent in a mutually guided discussion with Brian at the West African Farm.

The contrasts between the learning experiences of the Olsen family and the Vermaark family illustrate how differing family agendas and visitation preferences have an impact on the visit. It also illuminates the critical role an interpreter's style plays in shaping a family's visit to any particular farm. Family learning experiences are especially idiosyncratic in a living history museum because of the complex interactions of agendas, preferences, and narrative at each new farm site visited.

Summary of Assertion 3

A family's learning experience in a living history museum is dependent on the interplay of a variety of factors. The first is the way a particular historic interpreter portrays the museum's narrative, which is influenced by her understanding of the

museum's mission and goals, desired outcomes for visitors, and the curriculum for the particular exhibit. Her portrayal is also dependent on her individual knowledge and flexibility with engagement strategies. A family group brings its own agenda to the museum, as well as an inherent preference for how they would like to interact with an interpreter. At any given museum exhibit, the interactions between an interpreter and a family group are a result of all of these factors coming together, and may result in an intimate, extended discussion or may cause a family group to bypass an interpreter or an exhibit completely.

Assertion 4

Families believe living history museum learning lets them experience history up close through seeing, feeling, hearing, touching, and smelling.

One of the major appeals of a living history museum is the hands-on nature of the experience, especially when historic interpreters demonstrate and let the visitors try their hand at crafts and skills. There is also a perspective difference. While some of the topics the interpreters will talk about might be found in a typical history book, much of what goes on in the museum is about the lives of common people. Caleb, one of the interpreters, thinks of it as "a microscopic way of history, so that you are looking at an individual family's journeys rather than the Holy Roman Empire's government, or what the general history books talk about" since those books tend to convey "so broad of a picture, you don't get a feel for what the little guy was doing." Caleb strives, in his interpretation, to tell "a full-fledged story – making an individual person a bigger picture than what history would provide." Ellen summarized her family's understanding of this

in her follow-up interview weeks later, as she reported, "We do plan to visit more of these types of experiences in the future. My kids really enjoy being able to see history up close."

Look and Feel

The museum engenders this idea in visitors through offering a multisensory visiting experience. Much of a family's experience is perceived visually, and visitors get a sense of the past through its historic look. When asked about what makes a visit successful for families, Alistair shares that "the look of the farms [is critical] – the right barns, the right fencing, the right animals – that has to be right because it gives you a sense that you are in the moment." Caleb draws this idea one step further, moving beyond looking into feeling:

> Caleb: The house, when a person walks into it, should feel like a home, not a historic site. If it feels like an actual living place, if they, I mean, I certainly will tell them that I don't sleep here…
>
> JMBC: Do people ask that sometimes?
>
> Caleb: Yeah, people do ask that, absolutely they ask that. But I think that's a very valuable statement to make because it makes them feel like you are really invested in this, you could really live like this.

Stella, like Caleb, agrees that "When a kid, or sometimes even an adult, asks, 'Do you live here?' I feel like, yay, I'm doing my job!"

The ideas about the importance of look and feel expressed by the interpreters align with the experiences of the family groups. During their post-visit interview, I mentioned to Harper and Zoe that they both seemed particularly attracted to the cats in the houses, and wondered why they found the cats so appealing. Harper thought about it for a while, and then described to me how, unlike the historic interpreters who go home at

the end of the day, the cats really live in the houses. The small kernel that something living, breathing, warm and fuzzy is an actual resident of the building seeded her imagination with the possibilities for other living, breathing creatures in the residence. As Harper described the feeling to me, of how the cats made the houses seem, so much more concretely, like places people had lived, Zoe looked over at her, smiling proudly. She then looked up at me and put her finger on her nose, indicating she was in agreement with what Harper was saying, but not wanting to interrupt her daughter in mid-thought.

Both interpreters and family members alike mention the authentic look and feel as something that adds to the affective quality of the experience. None of these responses are geared towards a particularly academic goal, but rather explain how the visual style and the museum's permanent animal residents foster an emotional connection with the portrayed history. This connection is still educative, and may possibly encourage more academic understandings as well. The look of the museum, which in turn affects the feel of the houses, contributes to the family group's sense of what history looks like up close.

Hearing

A large portion of a family group's visit involves visual information, but visitors also use their sense of hearing to take in their experience. In the post-visit interview, Harper shared that "listening to people, who are excited about what they are talking about, talk" was her favorite part of the visit. In particular she noted the "kindness and respect" with which Brian described the Igbo culture and customs, as well as the "incredible knowledge and passion" displayed by Klaus, an interpreter on the German farm.

There are many things that families hear in the museum, beyond words. There are the sounds of the animals, the sounds of an interpreter working the loom, the sounds of a crackling fire, and sometimes the sound of live music. In the following excerpt, Daniel talks about what he finds compelling about music.

> Daniel: Music is incredibly popular with the visitors, and music is one of those things that demonstrates the blending of the cultures like nothing else can, including architecture.
>
> JMBC: I think it's more accessible to people, too.
>
> Daniel: Yeah, and they really enjoy it, and if you can get them up and dancing, especially kids, it becomes participatory.

Daniel suggests music works well to help visitor understand the blending of cultures that is at the core of the museum's narrative, based on instruments played, and styles of tunes. Caleb, however, uses it on the farms for a different reason.

> Caleb: One of the biggest things that has been of help to me [in engaging families], is learning [to play] music on the farms. It's always been a good icebreaker, because they'll ask about the music, which ultimately leads into why a person would have that kind of instrument, and why they would be playing that kind of music. I haven't found too many folks who don't have an appreciation for music.

Caleb was tuning and playing a dulcimer-like instrument when the Landry family visited the German farm. He talked to the family a bit about Michael Praetorius, a composer who was contemporary with Martin Luther in Germany, and then played a tune he had composed. The whole family sat and listened for a while, and then Oliver and Zane left to explore the barn outside. Arwen got up to follow them, looking back to her mom to come along, but Tracy said, "I'm going to stay and listen a bit. I like the music." Despite the fact it was Tracy who stayed and listened to Caleb play for the longest amount of time, it was Zane who mentioned the music in his follow-up interview. Zane

recalled very few concrete details from his visit, but did note "there was a man playing an instrument and there was a well in the German village."

Whether for illustrative purposes, as Daniel suggests, or as a way to engage families, as employed by Caleb, hearing music at the museum adds to a family's sense of experiencing history. It is of note that not all sounds at the museum are pleasant ones; and in particular some visiting family members seemed uncomfortable with the degree of noise at the blacksmith's shop. Grandmother Whitaker went so far as to sit on the far end of the shop, holding her ears and wincing a bit, as the blacksmith repeatedly struck the hot iron with one of his many hammers. Others merely commented on how loud it was or that the forging had briefly left a ringing in their ears.

Please Touch

In a museum that takes a hands-on approach to learning, visitors have many opportunities to interact with parts of the museum's collection. These instances of "touch" fall into several different categories. There is a family's overall interaction with historic buildings and material culture, or visitors may try walking in someone else's shoes to get a feel for some of the daily activities. Occasionally, and especially with repeat visitation, families may be disappointed in the offerings for hands-on experiences, especially if a particular chore or craft they've engaged in during a past visit is not available to them.

The very act of walking into the Irish farm finds families literally treading on history; one historic interpreter reminded Harper and Zoe that the stones they were standing on came from Ireland and were several hundred years old. Upstairs at the English house, Diana mentioned to her sons, "This is the actual house, if I'm not

mistaken. Look how there are numbers on everything!" Likewise, there is an open section of wall in the German farm where the wattle is exposed. Larry walked up to it, placed his hand on top of it and said, with an audible sense of awe, "I'm touching history!" These types of comments, from visitors and interpreters alike, acknowledge the understanding that the structures are authentic, thus the buildings themselves represent the sense of history the visitors seek.

This next example shows how Hope, who has a very strong preference for hands-on interactions, experienced the German farm.

> Hope walks into the common area. She peers into some baskets, looking through their contents, then looks up towards the windows and runs past Larry and her mom, heading towards the windows. When she gets to the windows she opens and closes them several times. She turns around, possibly looking for the rest of her family, and a pair of wooden clogs, nestled under a bench, catches her eye. She dashes over to the clogs and tries them on. She stomps around noisily, peering into baskets and opening trunks, while a volunteer interpreter trails a bit behind her, trying to engage her by explaining the role of work shoes.

The visceral stomping of the clogs, combined with the freedom to explore and rifle through cupboards and chests, made an impression on Hope. In her follow-up interview, when asked about remembering anything specific, she answered, "I liked the house with the clogs and the quilt and the chickens." Though that previous statement is not particularly specific, and Hope has melded two different farms in her mind (the 1850s American farm has the quilt she's recalling), the impression of stomping around and playing "dress up" in the clogs was notable enough that it was what she shared when asked about specifics. It was important enough to her to mention.

She also mentioned the farm by name, when asked which farm she would have liked to live on.

> Hope: [I liked] the German farm because we would have a lot of pets. I would like to fetch water from the well. I liked the big barn. I would love to take care of a cow in those clogs and wear a poufy dress to school. I liked the garden and the chickens.

While at the time of the visit, Hope seemed to be on a random exploration trajectory, several weeks after the fact she imagines a fairly rich, cohesive scenario for herself at the farm. It is unlikely she would have gone to school, for instance, but some of the other chores she identified might well be her jobs had she lived there. It is of particular note that she mentioned the cow, as the interpreter who tried to engage her pointed out how the clogs were good protection against having your foot stepped on by a cow. At the time she seemed to ignore him completely, but by way of the follow-up she revealed she had been listening all along.

Despite the reputation for hands-on learning, and the myriad potential opportunities to do chores or help with crafts at a living history museum, in reality a visiting experience might be mostly about talking in historic buildings. As compared to when they used to visit frequently, when Harper was between 4 and 7 years old, both she and Zoe family lamented the lack of hands-on opportunities this time around. In the following excerpt from our follow-up interview, Zoe and I discuss how difficult it seemed for Harper and her to find hands-on work to do.

> Zoe: The whole day, and I don't know if it was Harper's age that made it different, but in previous times that we've been there, people were much more offering of us to do stuff. And [this time] I felt we really had to seek things out, or ask about, 'Oh, can we try this little weaver thing', can we…
>
> JMBC: You had to ask the guy in Ireland twice about the stone, you were like, "Can we turn the stone?"
>
> Harper: Oh, yeah (laughs).
>
> JMBC: And he said, "Yes, we're coming to that…"

> Zoe starts laughing.
>
> JMBC: And you were like, "But I want to turn the stone!"
>
> Zoe and Harper are both laughing.
>
> JMBC: And he was like, "No, no, not yet. This is not the time to turn the stone."
>
> Zoe: (regaining her composure) Yeah. So I don't know if that's cause Harper's older that they don't think we would want to…?

While this interview excerpt makes light of the difficulties Zoe had in getting a chance to turn the grinding stone at the Irish farm, the lack of hands-on time was a real disappointment to her. Both Zoe and Harper repeatedly mentioned, throughout their interview, how they were surprised at the dearth of activities, how much they regretted not asking to do more, how they were expecting more offers to do things, and then, conversely, how fascinated they both were by Harper's experience using a tape loom ("little weaver thing") at the 1820s house.

Zoe identifies Harper's age as a possible reason for the lack of offers to do things, though, from my extensive observation over several months, that is likely only part of the issue. The larger barrier is the interpretation styles of some of the newer or volunteer staff, as discussed earlier in Assertion 2. During their visit, for instance, Harper and Zoe watched a volunteer interpreter demonstrate the work involved at the many different stages of flax processing. They neither asked to take a turn during this demonstration nor did the interpreter offer them an opportunity to try for themselves. During the follow-up interview, while Harper was recalling working with flax at a different farm during a trip many years before, Zoe mentioned despondently, "Yeah, and the Irish guy wouldn't let us do it." Despite the fact she did not ask, Zoe felt as though she was not allowed to

participate in the activity. This feeling came from the way the costumed interpreter conducted their interactions, as referred to in the excerpt above when he told her she needed to wait to turn the stone because they were not up to that part of his presentation. This lead to a sense of disappointment for the pair, as, according to Zoe, the experience "when you can step into the space, and then when you can… each level, when you can do something of the space…[is] the part I really love about this kind of museum."

Close Enough to Smell It

Visiting a series of working farms and historic buildings is considerably different than looking at pictures of these same structures. Up close and in person, the museum is home to a plethora of different smells. Throughout their visits, family members remarked on particular scents. These comments took a variety of forms, from casually mentioning a smell in the midst of something else, to physically recoiling at an overwhelmingly bad stench, or possibly relating a fragrance to a personal memory.

The first thing Michelle commented on, while observing the steps in wool processing, was that it "smells like barbeque." Ellen, the mother of Hope and Larry, remarked that she "loves the smell" as she and her family ascended the stairs to explore the upper floor of the English house. A few minutes later, her family gathered in the kitchen together, listening to an interpreter explain how they make cheese on the English farm. As can be seen from the following fieldnote excerpt, smell played a key role for Larry here, too:

> The interpreter walks over to a high shelf, stands on her tiptoes and grabs a short, stocky, cylinder, about the diameter of a dinner plate and the height of a juice glass. She hefts the large cylinder back and forth, and then holds it away from herself, extending both arms out in front of her, for the family to inspect. "This is our cheese. It's last year's cheese, so I wouldn't eat it, but this is what we make." She hands it to Ellen and picks

> back up with her talk about cheese making. Ellen looks at it for a moment, feeling the weight and the texture, and then hands it to her son, Larry. When Larry takes it, the first thing he does is hold it up to his face and take a long, deep, breath. He does this a few times, and then just stares at the cheese, holding it. He is completely focused on examining the cheese. Ellen turns away from the interpreter to look at Larry, and says, "You kinda like it, don't you?" and Larry responds with a sheepish grin, which slowly becomes a wider grin as he nods his head up and down at his mom.

While the rest of the family group listened to the interpreter talk, Larry's experience of cheese seemed to occur in a mostly sensory realm. He had been making eye contact with the interpreter and was apparently paying attention until he received the cheese sample. His personal connection to the smells and feeling of holding the homemade cheese trumped his interest in the more general information coming from the costumed interpreter. It was of such note that it caused his mom to lose interest, if somewhat briefly, in what the costumed interpreter was saying in favor of sharing in the cheese appreciation with her son.

When asked what he remembered from his visit in a follow-up question 8 weeks later, Larry did not specifically mention the cheese, but he did recall "the African village smelled like bacon." No one was cooking on the West African farm on the day they visited, and no other members of his family mentioned this in their follow-up comments. Larry is possibly remembering the smells from the fire at the English house, which is the farm next door. Perhaps he caught a whiff of that fire while visiting West Africa. He might also be confounding which scents he experienced at which farm. In any case, the memory of smell seems to have made an impression on Larry.

Smells are not always positive. A common occurrence was a reaction to the pigpen in front of the Irish farm. Some family members held their noses or squished up their faces upon nearing the pigs. Others made comments that ranged from, "I can smell

the pigs already," from the mother in one family, to, "This place smells like crap," from a teenaged boy. Other people mentioned the smells of the animals in their post-visit interview, or their post-visit meaning map.

In the Blacksmith's shop, Naomi, mom to seven-year-old Amira, commented on how she smelled something. Naomi wondered aloud, "Hmm, is that coal or iron that I am smelling?" The Blacksmith replied, "Iron doesn't really smell, so what you are smelling is probably the coal. In Ireland they would have used coal, or maybe peat." In this interaction, Naomi responds to a smell, and based on the exaggerated "Hmmm" at the beginning of her question, is using that as an opportunity to model question asking behavior for her daughter to emulate. The Blacksmith, in turn, answers the direct question by giving several bits of added information: Heating iron does not produce a particularly strong smell, the heat source in use in the Forge at the moment is coal, which does produce a strong smell, and another historically accurate method of heat production would be burning peat.

Later on, while walking through the 1850s American barn towards the end of the visit, Naomi wondered aloud to Amira, "I wonder if this is what the barn in Charlotte's Web might smell like?" Amira appeared not to respond to Naomi's attempt to engage her and connect their experience, with a public reference, to Amira's prior encounters with E. B. White's book. This comment does indicate, however, Naomi's understanding of the multisensory nature of their learning experience together.

Reactions can take on a more personal character. In the 1850s American barn, there was no historic interpreter present when Grandfather Whitaker stopped in the middle of the breezeway, scanned the upper levels of the haylofts, closed his eyes and

took a long, deep breath, then exhaled, slowly. He did not seem to be talking to anyone else as he said, “Ahh! This is the smell of my childhood.” While the three other members of his family were nearby in the barn, they did not seem to react to his statement. The grandfather seemed lost in thought for a few moments, and then moved on to see some sheep with his granddaughter, Darby.

In the previous example, the smells of the museum appear to connect the visitor with a feeling from his past, one that is only tangentially, if at all, related to what he is doing in the museum, in the moment. This is in contrast to the other instances where visitors’ experience of smell was solidly grounded in their immediate time and place. What links all of these instances together, however, is the affective experience that, like looking, hearing, or touching, encourages the family group’s belief that they are encountering history up close.

According to the beliefs expressed and enacted by the families in this inquiry, learning in a living history museum is all about the experience. It is a multi-sensory experience, where the look and feel of the farms, the sounds, the opportunities for hands-on engagement, and the smells all play a part in fostering an “up close” sense of history. In Zoe’s own words, her favorite aspect of the visit was “being outside, delving into history, experiencing other lives and seeing the impact we have on one another, seeing the impact of the past on the present.”

Summary of Assertion 4

Families believe that living history museum learning allows them to experience history in a tangible and immediate way. In particular, families are looking for a learning *experience*, something to share with friends and family, as well as a way to see, hear,

touch, smell, and do activities that they would otherwise be reading about in a book. Families believe living history museums offer "up close" encounters with the past as well as a different way of looking at the present.

Assertion 5

An individual's prior knowledge can influence living history museum learning by way of personal connections to new ideas. Prior knowledge may also create a false sense of understanding, particularly in the absence of historic interpreters.

Prior Knowledge Facilitates Personal Connections

Taken out of context, and without interpretation, a living history museum might seem like a collection of old buildings and antique objects. One of the ways historic interpreters demonstrate relevance of museum objects for visiting family groups, is through connections between what they see and do in the museum and their prior knowledge. This is usually accomplished through the use of public references, where interpreters relate something in the museum to something known through popular culture.

In the following examples, Brian uses public references to what he believes to be part of the visiting family's prior knowledge. In the first fieldnote excerpt, Brian shows the Segal family an African yam:

> Brian is holding a yam in his hands. He squats down to show the kids the yam, and hands it over to Amira to examine. "It is different than a sweet potato," he tells them, "much more starchy." Amira says, "It looks like some of it is missing?" Brian responds, "Yeah, that's my fault. I let it get wet and it got moldy so I had to cut off a bit. It should be about the size of a football." Amira nods, and Naomi asks her, "Do you know how big that is, how big a football is?" and Amira nods again and says, "Uh-huh."

When talking with the Vermaark family, Brian offers the following explanation on status:

> Brian: It's another status symbol — the intricacies of the carvings on the doors, and the number of yams a farmer had. It's a status symbol, just like

> the car you drive today. Just like what the car you drive says about you, that's what the yams and the carvings say.

In both cases, Brian makes use of modern comparisons, tapping into the prior knowledge of the visiting family in order to help them make personal connections to the Igbo people of West Africa in the 1700s.

Interpreters are not the only people to make use of prior knowledge to facilitate personal connections. Families also do this amongst themselves, to help solidify or clarify something an interpreter has said. This is shown in the following fieldnote excerpt, as Stella has just finished explaining the concept of primogeniture to the Whitaker family at the English house:

> Michelle asks, "What if the eldest wanted to do something else?" There is an awkward silence for a moment, and no one seems to answer. Michelle looks down at Darby, squeezes her on the shoulder, chuckles and says, "I guess maybe it was like Star Wars?" Darby laughs, and Grandmother adds, "You knew your place."

Michelle connects the idea that the first-born son of a yeoman farmer in 1600s England was destined to inherit the land and cultivate it with a public reference to Luke Skywalker's destiny as a Jedi. Darby laughs, appreciating her mother's comparison, while her grandmother reiterates the idea in a way that speaks to her own generation.

Families use both private and public references amongst themselves to connect their museum experience to their prior knowledge in the absence of interpreters, as well. As an example of a private reference, while looking around the West African farm, Diana Cole pointed to one of the houses and said to her sons, "We can ask Father Kevin about this. Jimmy would have a hard time here, wouldn't he?" From the rest of their discussion I gathered Father Kevin had gone on a mission trip to Africa at some point, but I never found out what they were talking about with regard to Jimmy. A private reference is

something that has relevance to a family, so it is no surprise I did not understand the comment. Both sons reacted as if they did, however, and as such likely understood the meaning and relevance of their mom's statement and question.

Families also use public references, as evidenced by this fieldnote excerpt from Zoe and Harper Vermaak's visit:

> Upon entering the compound walls of the West African farm, they both look all around at the grassless, hard packed dirt. Zoe says to Harper, "I always wondered what that meant, in "To Kill a Mockingbird", when they talk about a swept yard. Do you see?" Harper nods, smiling, her eyes lighting up, and Zoe continues, "This is it. This is a swept yard."

Later in their discussion with Brian, the interpreter, he points out the door to the yard and mentions the swept yard made it possible for Igbos to keep an eye out for dangerous animals. As he mentioned this, Harper and Zoe turned from Brian to look at each other, exchanged satisfied smiles and then a high five gesture. Their initial excitement at recognizing and connecting the swept yard from the book to the one in West Africa is celebrated again as Brian confirms their earlier connection.

In the previous examples, different people make different types of references, both public and private, to connect either something they see or an idea they are exploring to some knowledge or experience outside of the living history museum. These connections are made possible, in part, by the fact that the historic interpreters work in the third person model, so they share a common culture with the visiting families. This allows them to communicate effectively with families, and use shorter, more accessible explanations through comparisons and connection. Families also use the personal connections to prior knowledge to strengthen understanding, especially in seemingly unfamiliar historical settings.

Prior Knowledge may lead to a False Sense of Understanding

Both prior knowledge and identity can influence the degree of personal connections with the museum buildings, objects in the houses and barns, and the information presented by the historic interpreters. The absence of formal signage is typical at a living history museum, so when a family visits an exhibit that is either unstaffed, due to lack of museum resources, or a family chooses not to interact with an interpreter at a given exhibit (for a summary of such instances, see Table 3), they will often draw their own conclusions about what a particular tool is used for or why a house has a particular design element. If the family has limited prior knowledge in the area, they generally ask each other what an unknown object is or try out an unknown tool, occasionally venturing guesses out loud. Sometimes they merely look at the unknown artifact or the particular architectural detail without comment and then move on. If the family has significant prior knowledge, they often work together (though sometimes it is just the parents) to figure out the unknown object or detail. Sometimes the families are correct in their identification and interpretation, but other times they are not. In the latter case, due to the absence of historic interpreters to contradict their incorrect assertions, prior knowledge can create a false sense of understanding. This seems to occur most often at, but is not limited to, the West African exhibit.

The Whitakers had been talking with a female interpreter about the African exhibit for a few minutes, and then left her sitting in the Obi to go look into some of the other buildings on the farm. Upon entering the second wife's house, the following interaction took place between Darby and her grandmother:

> Darby sees a large wooden tool, with a long handle that comes up to her chest and a thick wooden cylinder attached at the base. It looks a bit like a giant pestle. Darby points at it, but turns towards her mom and

> grandparents and says, “What’s this thing?” Grandmother Whitaker eyes it carefully for a moment, looking it up and down, and tentatively responds, “Something for the floor, maybe, or maybe for the yams? It looks like you would use it to pound.” The family looks around the house for another minute or two, but since the house is sparsely furnished at present there isn’t a lot to see. When they emerge from the structure out into the yard, the interpreter is standing near the doorway. Grandma asks, “What is that large wooden tool in there?” The interpreter responds that it is called a “tamper” and it is used on the floors to make them smooth and hard.

Darby sees a tool she is not familiar with, so she naturally asks her more knowledgeable family members about it. Her grandmother, the self-proclaimed history buff, looks over the tool and imagines how it would be used in the place they are standing. She offers some guesses to Darby based on prior knowledge of what it looks like to her (“something to pound”) and the knowledge she has just acquired from the interpreter (yams were an important crop to the Igbo). Grandmother is not satisfied with her uncertainty about the tool, so she asks about it when she sees the interpreter again. The Whitakers leave the exhibit believing the Igbo used tampers to harden the floors, which is historically accurate.

A very similar occurrence was observed when the Landry family visited the West African exhibit, where they had also already encountered an interpreter and talked with her for a few minutes. Once they were done talking and listening, they toured around the buildings on their own. The following took place as they were exploring the second wife’s house:

> As they stoop to enter the house, Oliver remarks on the intricately carved doors, saying he really likes them. Arwen runs over towards a large wooden tool, that is almost as tall as she is, with a long handle and a thick wooden cylinder at the base. She calls out to her family, “Hey, everyone, look!” Her dad glances over at the tool and responds, “That’s for pounding grain, probably millet,” then looks back up at the roof and the walls. Arwen picks up the heavy tool and drops it to the ground a few times, while Tracy looks around, noticing the nearly empty house and says, “I

> want to know where the daughters live." Oliver counters that Tracy could not live here because there are no fiber arts, but she responds that she really likes the baskets she sees around the farm. Oliver rolls his eyes and mutters, in mock exasperation, "You don't need to take that up now!" Arwen, who has been looking around on her own while they were walking, runs outside and calls to the family, "Hey, guys, come look! I'm in jail! Help me!" The rest of the family exits the house, goes over to where Arwen is standing, with her hands on some wooden slats, and ignoring her pretend play, her dad tells her to, "Come along," as the family takes their leave of the exhibit.

There are two major differences between the Landry family's and the Whitaker family's experience. The first is that Darby asked her other family members about the tool, and her grandmother responded with several possibilities. Arwen wanted to show off what she had found to her family, but did not ask for what it was or how it was used. Despite the lack of questions, her dad responded as if she had asked a question. His response was a seemingly definitive and authoritative answer, and not a list of possibilities. Secondly, in the Landry family's experience, there was no interpreter waiting at the door as they exited the second wife's house. Based on his prior knowledge, Oliver seemed certain of his answer about the tamper, and Arwen believed it to be the case as well, so no one in the family checked their understanding with an interpreter. They therefore left the exhibit believing that the Igbo pounded millet with the tool they saw, which is historically inaccurate.

Summary of Assertion 5

Prior knowledge, both individual and familial, influences a family member's learning experience at a living history museum. Historic interpreters use prior knowledge as a link between past and present, and families make use of it to clarify their understandings of discussions with interpreters or of what they see on their own. In the absence of historical interpreters, prior knowledge may facilitate a false sense of

understanding amongst family members, as they apply what they already know to novel circumstances. Whether helpful or harmful, prior knowledge influences a family's living history museum learning experience.

Assertion 6

An individual's identity can influence living history museum learning by way of personal connections in the form of family stories and imaginative play.

Identity Facilitates Personal Connections

Both historic interpreters and family group visitors alike can make use of public references to connect museum experiences to prior knowledge. In the realm of connections with identity, private references among family members are most common. For example, in the following vignette, Oliver Landry relates to his family how the Irish farmhouse at the museum compares to a house they have previously visited together.

Vignette 2

The interpreter has just finished explaining about where the children would sleep in a two-room house, and everyone is gathered in the main room. Zane and Arwen are sitting next to each other on a bench, gently kicking their feet against the wood underneath while Tracy stands next to Oliver, facing the children. Oliver looks to the children and says poignantly, "Do you remember Madeline's house?" Neither child responds right away, as Zane looks down at his feet and Arwen looks up at the jars sitting on the red wooden cupboard. Oliver looks over to Tracy, who nods at him. "It's just like this house, the two room construction. The difference is that her house is two rooms on top of two rooms, because there was another family, remember? A mother and son, or was it a mother and daughter?" Both Zane and Arwen are looking attentively at their dad now, but their expressions remain passive. The historic interpreter has stopped what he was doing and is now watching Oliver, too. Oliver continues on with his story, saying, "Remember the dining room? The dining room where we ate all those dreadful meals?"

At the mention of the dreadful meals, Arwen's face lights up and she says, excitedly with a bit of a laugh, "Oh, yeah, all those dreadful meals!"

There is a brief pause, so the interpreter goes to the window to grab a wooden bowl to pass around to the family members. He brings it over to Tracy, who is now standing with Zane, and begins to show them how they process flax on the Irish farm. Oliver has walked over to the cupboard to admire the dishes, and comments that the dishes are made from pewter. The interpreter responds that they are, but wood would have been more likely for the family that lived on this farm. Oliver turns back towards his wife and children, a pewter mug in his hand, and tells them, "Where Madeline lives, they have tin, so that made them wealthy."

This vignette shows how Oliver connects the museum's Irish house to an experience the whole Landry family had visiting someone in Cornwall. Initially, Oliver seems like he is merely commenting on how the Irish architecture compares to a house he has seen in Cornwall. When his initial query to his children, "Do you remember Madeline's house," is met without answer, he proceeds to expand and elaborate on the private reference in the connection he is trying to make. When there is still no response, he further invokes his family's personal involvement in the story he's telling, by asking if they remember the dining room, making it even more personal with the reminder of "all those dreadful meals." This phrase sparks a memory in Arwen, as she connects herself, as a member of her family, to the identity of someone who has experienced "all those dreadful meals" in Cornwall, which in turn connects her family to this house in Ireland.

At the apparent end of the story, the interpreter resumes his planned interpretation by handing around the bowl of flax. Oliver is not interested in what the interpreter has to share, but continues his exploration of the house and sees the pewter dishes. When the interpreter tells him that the dishes would probably have been wooden, he responds by

identifying, yet again, with the family's experience at Madeline's house, by way of the remarks about tin.

This is also an example of how, even in the presence of an historical interpreter, the museum can be appropriated to tell a story of the visiting family's own identity through personal connections. This is one of the ways in which identity influences learning in a living history museum.

The influence of a visitor's identity on museum learning can also be seen in episodes of imaginative play. For example, at the Irish farm, Hope and Larry took ownership of the beds the interpreter told them would have been theirs.

> Billy discusses where each child would sleep, starting with Larry, who is the oldest, but Larry and Hope start to kick each other as they are getting antsy, and Hope looks annoyed. She wants to know where her bed is, so I take her into the other room and tell her how the bench converts into a bed, but challenge her to figure out how. She's having a bit of trouble with it and asks for help, but I just stand there. Larry pokes his head into the room and says, "You should see my bed," and Hope says, "I can't make my bed!" so she and Larry work together to fold out the bench into a bed. Giddily, Hope jumps in and Larry runs back into the other room calling, "Mom, come see Hope's bed!" Larry returns with his mom in tow, and proceeds to tease Hope about how she's the "baby, sleeping in the baby bed." Hope seems unfazed by his teasing, but reminds them all about how it is *her* bed. She tells Larry that he is not allowed in it!

This fairly brief scene shows how Hope and Larry utilized the information that they received about where children would sleep and connected it to their own family identities of being older and younger siblings. Additionally, by taking ownership of the bed, Hope's identity as a younger sibling in her family connects her to the countless children that would have slept in a similar bed in Ireland.

In the follow-up interview weeks later, Larry mentioned this event as well. He shared that one of the specifics he remembers from his visit was "the Irish house where I

picked my own room." Further, he adds that he would choose to live at the English house because "I liked that I would have the higher part of the bed, and Hope would have to sleep on the lower part that pulled out." According to the observation notes, the interpreter Larry talked with in England never mentioned the beds upstairs, and there is no record of Larry discussing with his mom or sister where each sibling would sleep, just which bed was for the parents and which for the children. It is therefore possible that his understanding of the pecking order associated with bed choice came from his later interactions with Billy (the interpreter) and Hope at the Irish farm. Perhaps, upon later reflection, Larry connected the status of bed locations conferred by birth order in Ireland to a similar custom in England.

While the previous instance of identity-related imaginary play involved multiple visitors, Arwen engaged in a different type of pretend play. When Arwen walked into the bedroom in the 1820s house, the first thing she noticed was a baby cradle. While her mother and brother looked over objects on a dresser and in a trunk, and admired the adjoining room, Arwen went straight over to the cradle and peered inside.

> She began to rock it with her foot, and then looked into the bed that was positioned next to it. "I would sleep here," she began, "and my baby sister would sleep next to me, here in this cradle. I would take care of the baby, and rock her, and play with her, and…" As she talks she goes about straightening up the linens in the cradle, and smiling into it, pretending there is a baby inside. Her focus is interrupted when Oliver, peering out the window, comments that the museum's garden is doing better than their own, particularly the onions and lettuce. She turns to look at her Dad, and then walks to the window to see what he's pointing out.

Arwen begins her imaginative play when she catches sight of the baby cradle. In play, she takes on the identity of an older sister, even though she is in reality only a younger one. Using the house's furniture as props, she imagines a life for herself where she has a

baby sister. Like Hope and Larry on the Irish farm, she makes a personal connection to the real people who lived in the house.

At their next stop, the 1850s American Farm, Arwen again imagines her life on that farm. In this episode, her imaginative play is sparked by an historic interpreter's suggestion.

> Inside the house, Arwen finds a skinny wooden barrel-like cylinder in a corner, with a long handle like a broom sticking up inside. "Hey, Mom" she calls, "what's this?" Her mother is already outside on the back porch, and does not appear to hear her. After a few moments, an older female volunteer interpreter standing near by answers her question instead. "It's a butter churn," says the woman. "If you lived here, you would spend many hours churning butter." Arwen nods as the woman talks about cooking, sewing, and other chores a young girl might do. Arwen pipes up suddenly, not making eye contact as she says, "And my brother would be out with an axe chopping wood in the summertime, and maybe I would work in the garden, too." She pauses for a moment, and then looks at the interpreter. "I wonder what I would do in winter time? Perhaps I would sit by the fire, knitting? Or maybe sewing?"

Historic interpreters may add to or facilitate imaginative play by helping kids tell stories of what their life might be like if they had lived in the house they are visiting. At the West African farm, Corey crouched down to get on eye level with the kids as they were weeding, and asked them about going to school. Establishing with the kids what school was like for them in present day, he told them that what they were doing right then – weeding the garden – would have been their "school," just like on some of the other farms, like Ireland or England. This led to a discussion among the kids about what they imagined they would learn in their field school, as Corey stood back up and continued to talk with their mom. These episodes are similar to the child-initiated play with the cradle, but the addition of a more knowledgeable adult to flesh out the contexts of the imagined life provides a scaffold for the children.

Summary of Assertion 6

Identity, both individual and familial, influences a family member's learning experience at a living history museum. Identity is explored through family stories and memories, including appropriating the museum exhibits to tell a personal story in favor of the museum's narrative. Identity also influences learning through acts of pretend play; either facilitated by a costumed interpreter or spontaneously initiated by a child. Additionally, acts of imaginative play may be group undertakings or solo endeavors.

Assertion 7

Weeks after their visit, families remember both the personal and the novel, but neither in much detail.

There are a lot of things to see and a lot of information to hear about and discuss during a visit to the museum. In addition, in many cases there are chores to help with or crafts to try out. The families in this study spent anywhere from 1.5 hours (though this family was only observed for half of their visit) to 6 hours visiting the museum. Weeks later, they were asked to recall specifics about their museum trip, what they enjoyed about it, what they were interested in learning more about, and if the visit had influenced their daily life in any particular way.

Since most of these weeks later follow-up interviews were conducted via email, at the families' requests, extensive follow-up beyond the initial questions was not really possible. It is likewise not possible to ascertain exactly when the families completed the follow-up questions, as the only dates of record are when the questions were returned by email. In addition, not every member of the observed family group completed a follow-up interview. Despite these limitations and from the few details that they did provide, a picture emerges of memories of both the personal and the novel.

Table 4: Family Group Follow-up Interviews Completed

Family	Number of Visitors	Children in Group	Number of Follow-ups	Follow-up Method	Follow-up Time Period
Whitaker	4	Darby (10)	1	Email	9 weeks
Landry	4	Arwen (7) Zane (9)	4	Email	6 weeks
Cole	3	Boy1 (13) Boy2 (15)	1	Email	6 weeks
Olsen	3	Hope (9) Larry (10)	2.5*	Email	8 weeks
Segal	2	Amira (7)	2	In Person	5 weeks
Vermaark	2	Harper (16)	2	In Person	5 weeks

Note. *Some questions skipped

The Personal: Animals and Children

The most common experience the kids remembered from their visit was seeing, petting, holding, and feeding a number of different animals. In the following interview excerpt, Amira, age 7, recounts what she did the day of her visit:

> JMBC: Can you tell me about what you did at the museum last month; remember when we all went around together?
>
> Amira: I liked the chickens. I liked feeding the ducks, and petting the goats.
>
> JMBC: What about the chickens? What do you remember about the chickens?
>
> Amira: There were a bunch of chickens in different places. I liked the really calm one.
>
> JMBC: The one that let you pick her up, the one who let you hold her?
>
> Amira: Yes, that one. That's the one I liked the best.

Amira mentions several activities all related to animals, and then selects the specific interaction with animals she had in mind. The incident she's relating concerns her visit to

the Irish farm. Unbeknownst to her mom, who was getting her brother to head to the next farm, Amira went over to where the chickens were gathered and picked one up. She then brought it back to show her mom, who was extremely surprised. I asked her if she had ever held a chicken before, and she told me she had not. She seemed very pleased with herself at the time, despite the fact she was told to put the chicken down and keep on going. This is the memory that came first to her mind as we discussed her visit.

In fact, Darby, age 10, a self-described animal lover, recounts almost her entire experience based on which animals were at the farms she visited:

> [Next was] where the cat was, and where they made wool, put it in a pot and cleaned it; the next place had pigs and chickens, and the people had different kinds of beds, and they made oatmeal by turning this wooden thing… Then the next place had a garden, a farm, all kinds of chickens with feathers that went over their head, and they had a house where a lot of people lived in it. Their toilet was a bowl! I also saw a big English house, and one of them had a spring room that kept the water cold from the stream, and it had pigs, a children's room, parents' room, and it had a cat. There was another English house that had goats, childrens' room, and a parents' room. Both houses had stairs.

Darby recalled her visit thorough the animals she saw at each exhibit, but the string of animal related memories also contains some of the new information she encountered as well. She mentions wool processing in England, the custom of sleeping sitting up and grinding oat flour in Ireland, and the garden and the chamber pot in Germany, as well as the fact there would have been upwards of 10 people living in the house. Despite the initial appearance that she did little more than focus on the many animals during her visit, she was clearly tuned in to some of the other things going on during the trip.

The focus on animals came almost entirely from the children. The adults, however, often recalled something specific about their children's experience or behavior at the museum. Examples of these varied remarks include simple statements like "it was

hot, and Arwen was complaining that she was going to die" from her mom, Tracy, as well as a more detailed description from Naomi of how much Amira liked interacting with the young female interpreter she met at the English farm.

Naomi, having spent much of the visit wrangling Amira's two younger brothers, did not recall a lot of specifics from the visit. She did, however, mention that Amira spent "a lot" of time with Jane, a female interpreter at the English farm, and that she did "all sorts of stuff, carding, sweeping, and asked a lot of questions. I don't know what all else because I was outside with the baby, but she seemed to really enjoy talking with [Jane]." While Naomi and I continued to talk about what Naomi remembered from the visit, Amira, who had already completed her part of the follow-up, piped up with further details on her interactions with Jane. She told us that Jane "wore an apron so she didn't have to change her clothes all the time and they wouldn't get dirty. She could just throw it off if company came over and she'd be clean." For the next few minutes, Amira added in several more details about talking to Jane while Naomi and I finished up.

Amira didn't tell me much about Jane on her own, but once her mom started talking about Amira's interactions with Jane, this apparently sparked a whole new set of memories. While Naomi recalled that her child had enjoyed herself particularly when visiting the English farm, her interest seemed to encourage Amira's retelling, making it personal for both of them.

It is of little surprise that interactions of a personal nature, be it an area of particular personal interest, like animals, or just the things your children did during the museum visit, would be most immediately memorable to the families I studied. This is by no means a comprehensive account of what people remember, but it represents the

personal nature of free-choice learning, and the idea that people pick and choose bits and pieces of what is meaningful to them during an educational leisure experience.

The Novel: West Africa

One of the most commonly mentioned memories of the museum was related to the West African farm. This is the newest "old world" exhibit, and likely the culture portrayed with which the families have the least familiarity. The following quotes demonstrate a range in terms of amount of detail and use of terminology in reference to memories from the museum.

> "I remember the stick houses with the mud walls" (Arwen, age 7).
>
> "The mud place with the pottery – African village. It had little benches" (Hope, age 9).
>
> "In the African village, a man would have his 2 wives in 2 houses" (Zane, age 9).
>
> "I remember the desert looking place, that the man had two wives, and that he always got the best of everything" (Darby, age 10).
>
> "How the other tribes were the ones who were enslaving, which was sort of interesting and sad…" (Harper, age 16).
>
> "I noticed that the museum had grown since I was there last. They added the African home area" (Diana, parent).
>
> "I was interested to see the African farm, the choice of African culture to showcase, and the farm's layout - didn't know about the importance of yams in that culture" (Oliver, parent).
>
> "We had just watched a rainforest video, they were making bread and drying it on the roof of their house, and I remember being so excited to see the houses in Africa, with the roofs just like in the video we had watched! I didn't expect to see them there, to see an example in Virginia" (Naomi, parent).

In most instances the family members use the term "African" when referring to the exhibit, though two of the children describe the site without this detail. The scope of

the commentary from the children includes references to the houses being made of mud, and the pottery and furniture inside the houses. These are all very tangible pieces of the West African exhibit, and therefore represent tangible aspects of Igbo culture. Another common detail is the fact that the man would have had two wives. This detail is a matter of social custom in the culture portrayed, which is more complex than the tangible objects typically remembered by children. It does, however, have a physical component, in that when visiting the museum an historic interpreter will talk about the man's two wives and point out the physical structures of the first wife's house and the second wife's house. In light of this understanding, the children's memories remain in the immediate, tangible realm.

The exception to this pattern is the 16-year-old Harper. Her main memory is of an intangible social occurrence, that the Igbo were initially and primarily enslaved then sold by other African tribes. Perhaps this stood out to her as it contradicts a common belief that the Europeans who shipped slaves to the Americas were also the ones doing the enslaving. It is also possible, since Harper is several years older than most of the other children, that her responses fall more along the lines of the types of comments the adults make, which I address next.

The parents give a bit more context in their responses. Diana's mention of the museum growing, for instance, implicitly shows prior knowledge of how the museum was structured during her previous visits. Oliver identifies the choice of cultures to represent, and the fact that the choice was made. It is not clear if his comment on the layout refers to the analogy between houses on the farm and rooms in houses in Western culture, or if he meant something along the lines of the physical spacing of buildings or

the enclosing wall of the compound. In either case, this comment shows a slightly wider, more nuanced view of the farm than mentioning it was newly built. Additionally, the comment about the yams shows Oliver retained a concrete detail that was new to him and had no physical representation in the museum, as the interpreter mentioned it but did not have any yams to show as examples. Naomi's response is less nuanced about the African farm as a standalone exhibit. It does show, however, both the personal connection with prior knowledge she made at the time of her visit, and that later she recalled the exhibit in the context of the prior knowledge from the video she had originally mentioned. In addition, it is the only response in the group that touches on the affective domain, as she recalls both surprise and excitement at seeing the African houses.

Summary of Assertion 7

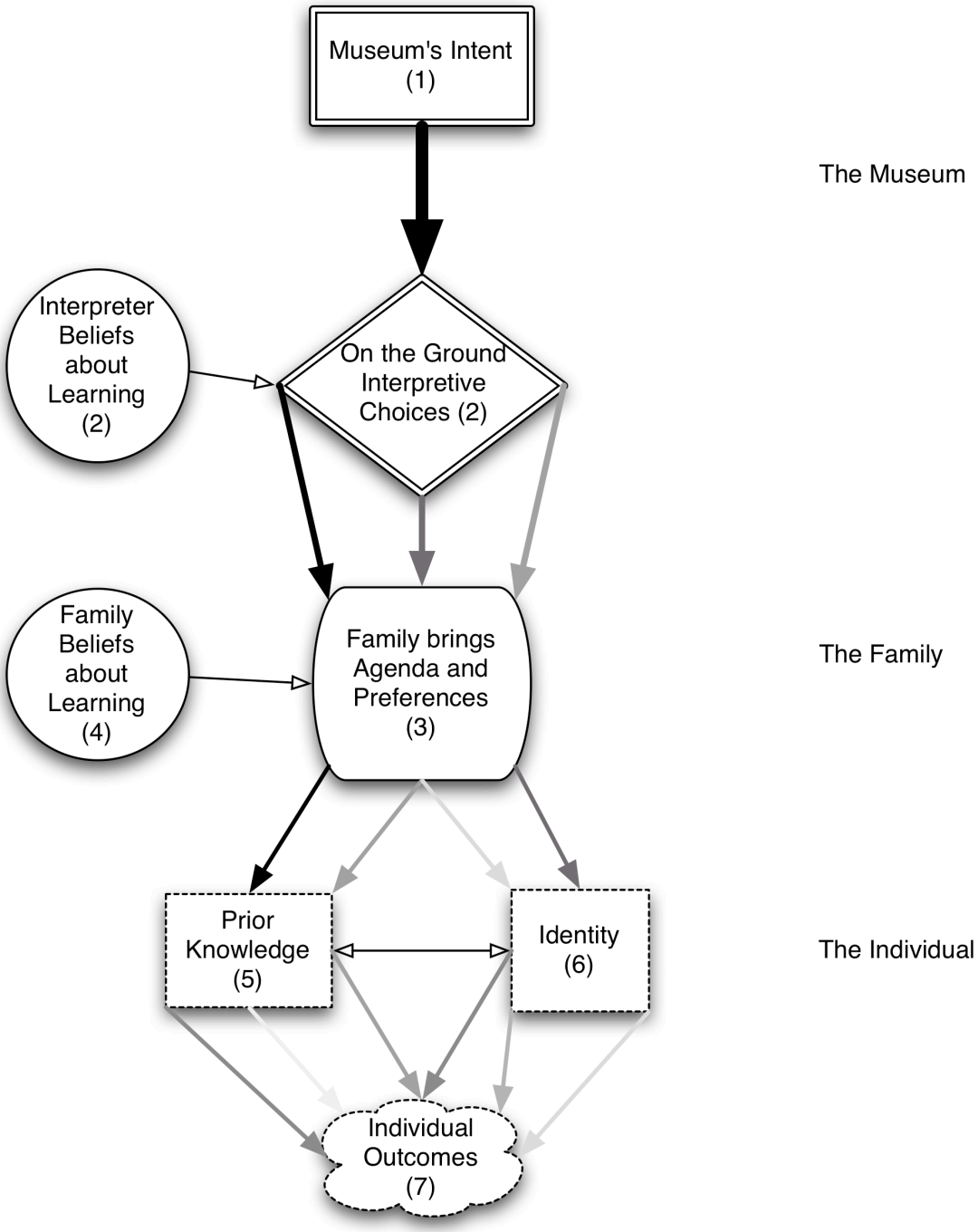
One to two months after their initial visits, family members recall a wide variety of tidbits from their museum experience. These memories tend to relate to either novel experiences or information, or personal ones. In the former case, the West African farm was the most memorable to the majority of family visitors, while in the latter case the children recalled the animals while the parents recalled their children's experiences.

Assertion 8

The museum's educational intentions are transformed through the successive layers of interpretations by the costumed interpreters, the family group as a whole, and the prior knowledge and identity of the individual family members.

The following figure depicts the relationship between the previous seven assertions, and how these assertions, taken together, represent the transformation of the museum's educational intent.

Figure 4: The Transformation of the Museum's Educational Intentions



The intent of the museum, as explored in Assertion 1, is to actively engage family groups with the daily life experiences of people who lived during a time in the past. On the ground, costumed interpreters are responsible for enacting the museum's curriculum in

their interactions with family groups. While a core body of information guides their presentations, interactions, and demonstrations, what actually occurs is ultimately at the particular historic interpreter's discretion, as discussed in Assertion 2. The next link in the chain of interpretation is the family as a group. Families respond to the historic interpreters by bringing their own agendas and asking their own questions, and thus influence the content and course of the interactions, as seen in Assertion 3. From the influence of the family group as a whole, whose beliefs about learning were discussed in Assertion 4, the meaning-making moves on to the individual family member. At this layer of interpretation, an individual's prior knowledge and identity influence their personal connections to the museum, as laid out in Assertions 5 and 6. These individual experiences, as transformed through the series of interpretations, are the basis for the wide variety of individual outcomes as detailed in Assertion 7. Taken as a whole, the layers of interpretation transform the museum's educational intent in a variety of ways, as represented by the shades of grey in the arrows in Figure 4, above.

Sometimes the transformation of intent seems to occur "by accident." In the following fieldnote excerpt, a costumed interpreter explains to the Landry family how oats were ground on the Irish farm as the visiting family members take turns turning the stone.

> Next at the wheel is Arwen, who grinds slowly and looks off in the distance, then whispers in a wistful, dreamy voice, "I can only imagine grinding like this for a few hours." Her dad, Oliver, chuckles and says, "Just think of it as if this is your video game. This is grinding with Mario." Both Zane and Arwen start to laugh, and Arwen picks up the pace and intensity with which she is moving the stone. She calls over to her brother, "Zane! I'm Mario!" Zane responds, "I'm Luigi! And we're grinding! It's a race!"

The educational intent of both the museum and the costumed interpreter was to demonstrate an essential chore of daily life for the Ulster Scots. When Arwen began grinding, her imaginary narrative aligned with the one enacted by the costumed interpreter as he presented the grinding stone to her family. Her narrative changed once her father drew the comparison between the work of the time and modern day video game play. The grinding of the stone was subsequently transformed, through the influence of the family group and then the individual participants, into a racing game competition between the two siblings. The transformation began with Oliver's offhand comment, but was fully realized as Arwen and Zane played out their hybrid Super Mario Brothers grain milling video game.

In other cases, parents may more directly influence the transformation of the museum's educational intent. In the following fieldnote excerpt, Diana Cole and her two boys are visiting the Blacksmith at the Forge, watching as he makes nails.

> There are already other visitors inside when Diana and her sons enter the building. Diana asks, "Are you going to make a nail?" Billy the Blacksmith responds, "It sounds like you've been here before?" Diana smiles and laughs a bit in response but does not say anything. Billy proceeds to make a nail and talks through the process as he goes, saying, "Here I'm making the point, and I should draw it out like this…." Billy goes on to describe how he would make a spoon, pointing to the example steps laid out on the floor of the Forge. The family stands as a group and watches for a while, not saying anything. After a minute, Diana points to the S-hooks that are sitting next to the growing pile of nails to which Billy adds each nail he makes. "See those, there?" Diana asks, jabbing her finger towards the hooks. "What do we use those for at our house?" Her two sons respond, while keeping their eyes towards the Blacksmith, with a variety of answers including "hanging pans," "hanging clothes," "human flesh," herbs," and "apples," before the younger one ventures "hanging plants." "Yes," says Diana excitedly, "that's what I was thinking of!"

Diana begins the interaction with the Blacksmith by sharing her familiarity with the museum's curriculum, which Billy acknowledges. He continues to work on making nails

and describes the process, while Diana and family observe. After a bit of time passes, Diana takes the opportunity to fork the conversation, and while Billy explains how he makes a spoon to the other visitors, Diana asks her sons about the utility of another item that is made in the Forge. She doesn't ask what the s-hook would have been used for in the time portrayed by the Museum's narrative, but rather transforms the context to present day and her own family's practices. From her children's answers, it seems as though they might be answering her question in a variety of contexts; all but the obviously sarcastic "human flesh" might apply to the museum's narrative of daily life in the past or to the children's own home experience. The sought after answer, "hanging plants," cements Diana's momentary transformation of the narrative. The fact that her children do not seem to wholeheartedly join her, giving vague or tongue-in-cheek responses, might indicate their interest in maintaining a connection to the museum's narrative. It may also suggest the boys are more interested in watching the Blacksmith work than talking about anything in particular.

In the Landry family, an offhand remark from the father led to the children engaging further with a transformed idea. In the Cole family, despite the mother's attempted transformation of the use of the blacksmith's wares, the children seemed relatively uninterested. The transformation of intentions may occur at a particular step in the interpretation process, as highlighted in the previous examples. It may also occur more organically, as an interaction between costumed interpreter and visiting child progresses.

In the fieldnote excerpt that follows, Amira and her 5-year-old brother Max are visiting with the costumed interpreter on the front porch in 1820s America, while their mom Naomi tends to their little brother on a bench in the yard, below.

> Max and Amira watch as the interpreter, sitting on the shaving horse, works with the drawknife. "I'd like a knife," Max mentions aloud, not really to anyone in particular. "You would? Huh, well, let's see, we'd need to ask your parents," responds the interpreter. Max shouts down to his Mom, "Can he make me a knife?" Naomi responds, shrugging, "Sure, I guess," and the interpreter begins to shave something out of the demonstration piece of wood. As the Interpreter works, Max has an enormous smile on his face and he stares, transfixed, barely moving. He is hanging on every draw of the knife as the interpreter shaves off wood to form a wooden knife. A minute or two goes by and Max does not move. He is rooted to the spot and continues staring. Amira seems to lose interest in the demonstration and wanders over to sit on a different shaving horse. When he's done, the interpreter looks to Max and says, "Well, that's about the best I can do, I hope it suits you. Here you go," and hands the knife to Max.

The historic interpreter began the interaction by demonstrating the use of the drawknife and shaving horse, which is a typical activity for the time represented. As he worked, Max admired the process, musing how he would like his own knife. Rather than acknowledging Max's wish and then moving on with another period task, the interpreter continued working with the drawknife to make a knife for Max to use. Max is absolutely fascinated by the process, not just with watching the interpreter work but because he is crafting a knife for Max. Amira, who has no personal stake in the process, quickly moves on to another activity. Max remains in the moment, watching the knife slowly take shape out of the piece of wood.

The narrative transformation in this event is not a distinct comment or question but rather a process. The process begins as a typical demonstration, but the influence of Max's desire for a knife, and the interpreter's response to make him one, and the

inclusion of parental permission, shapes the interaction into something beyond the museum's intention of the portrayal of daily life long ago. The end result is a gift from the interpreter to the visiting child. The toy knife has no practical use or historical value, but it signifies Max's participation in the interpretation process, as well as shows Max's power within the setting. While the familial level of transformation in this case functioned mainly as a gatekeeper for the knife-making process, the museum's intention was nonetheless transformed through the successive layers of interpretation including interpreter, family, and individual child.

In all of the previous examples as well as in many more presented as evidence in the preceding assertions, transformations of museum intentions vary greatly. They occur at different points in the interpretive chain, and they can take the form of a single twist or multiple turns. In some cases the transformations are very small, consisting largely of an individual's incorporation of the meaning-making experience, while in other cases the transformation may significantly alter the museum's stated intentions. In all cases, however, the museum's educational intent was transformed through the successive interpretations of the costumed interpreter, the family group as a whole, and the prior knowledge and identity of the individual family member.

Summary of Assertion 8

Historic interpreters, family groups, and individual family members transform the museum's educational intent through the consecutive process of multiple interpretations. Sometimes this transformation is accidentally sparked by an off-hand comment, while other times a family member might purposefully pose a question that shifts the narrative. Still other times, the transformation does not take place at a single point but rather during

the course of an interaction between costumed interpreters and family members. Most visitors achieve the outcome of an "informative and pleasurable experience" as identified by an upper level administrator, but the visitor experience entails far more than just the depiction of everyday life in a time in the past.

Summary

This chapter presented eight different assertions that related to a number of different aspects of a family group's learning experience in a living history museum. The first assertion addressed the museum's organizational goals, intentions, and theory for learning. The next assertion addressed the beliefs and practices of the historic interpreters concerning visitor learning as they enact the museum's curriculum. The third assertion involved the learning experiences of family groups interacting with historic interpreters, while the fourth assertion addressed the beliefs about living history museum learning as expressed and demonstrated by family groups. The fifth and sixth assertions pertained to the influence of an individual's prior knowledge and identity on museum learning. The seventh assertion concerned the individual family members' learning outcomes from the visit. The final assertion addressed how the museum's intentions are transformed through the successive interpretations of the costumed interpreters, the family group as a whole, and the prior knowledge and identity of the individual family members. In the next chapter, I will provide a discussion of these findings as they relate to the existing research, as well as the implications of these findings for research and practice.

CHAPTER 5

DISCUSSION

Overview

In the following sections I will discuss the findings of this study in relation to the existing research on family learning in museums, as well as some practical implications for both family groups and museum professionals. I then address the limitations of this research, and make some suggestions for future work in this area.

Relationship to the Research Literature and Theory

In light of the evidence from approximately 20 years of research on family learning in museums, several findings in this study of living history museums support those found in previous research on science, natural history, art, and children's museums. In relation to a holistic picture of the learning experience for families in a living history museum, this study contributes useful data to the very small but slowly growing body of literature. A brief discussion of how the findings from the four research questions in this study relate to current research and theory is presented below.

Historic Interpreter Interactions and Family Learning Experiences

Families came to the museum with agendas of entertainment and leisure or education. In relation to the specific literature on visitor motivation (Falk, Moussouri, & Coulson, 1998), however, more subtle distinctions arose as all six of the categories of place, education, life cycle, social event, entertainment, and practical issues arose as motivation for the families' visits. This study also found that family agendas have an

impact on how families engage with interpreters and exhibits. The findings in this study support the other literature on family agendas (Falk, Moussouri, & Coulson, 1998; Packer & Ballantyne, 2002; Falk, 2006).

Rosenthal and Blankman-Hetrick's (2002) study of families at Conner Prairie found they were most likely to learn when an interpreter stimulated the conversation and was able to engage both adults and children within the family group. This aligns with the experience of the family groups in this inquiry. Families often chose to skip whole farms due to their perceptions of a potentially useless interpretive experience, and they were particularly wary if they had previously encountered a "bad" interpretation. Conversely, "good" interpretation was particularly memorable to some of the family members. This finding also supports Gross and Zimmerman's (2002) claim that to successfully facilitate visitor connections, historic interpreters require in-depth knowledge of the artifacts and culture and must be proficient in a range of interpretive techniques.

Despite negative feelings about interpretation earlier in their visit, a particularly skillful costumed interpreter could also draw family groups back into the interactive museum experience. This occurrence reflects similar findings from Sterry and Beaumont (2006); families prefer activities that do not look like what they would do at school, and want to learn without realizing they are doing so. This experience also supports Packer's (2006) notion that the majority of visitors to an educational leisure setting are drawn into learning experiences even if they do not recognize them as such.

Weeks after their visit, family groups recalled a varied assortment of experiences and ideas pertaining most often to the West African exhibit and to their own personal experiences, though neither in much detail. This finding supports the personal, social, and

idiosyncratic nature of constructivist learning (Piaget & Inhelder, 1972; Vygotsky, 1978; Hein, 1998; Roschelle, 1995; Falk & Dierking, 1992, 2000; Leinhardt & Crowley, 1998; Leinhardt, Crowley, & Knutson, 2002). Despite being members of a cohesive family group, individual family members responded to the living history museum experience in different ways as a function of their own prior knowledge and identity.

Prior Knowledge and Identity Influence Personal Connections

The results of this study show that prior knowledge and identity influence a family's museum learning experience by means of establishing personal connections. According to Silverman (1997), successful live interpretation should permit museum visitors to situate public history in the context of their own family history, experience, and prior knowledge. Parents and children create personal relevance, on their own or in conjunction with a costumed interpreter. This study supports the previous findings that prior knowledge and identity play an important role in the museum learning experience.

While interacting with families, costumed interpreters tap into prior knowledge as they explain and discuss the elements of an exhibit. In West Africa, for instance, an interpreter might compare the historical status symbol of intricately carved doors with the modern status symbols of the car someone drives. They are able to do this in part because of the third-person interpretation style employed at the museum, where the visitor and interpreter share a contemporary cultural background. This particular use of prior knowledge aligns with Tilden's first principle that "any interpretation that does not somehow relate what is being displayed or described to something within the personality or experience of the visitor will be sterile" (Tilden, 1957 as quoted in Gross & Zimmerman, 2002, p. 273). Research has shown the use of prior knowledge to connect

with visitors is considered critical for successful interpretation (Gross & Zimmerman, 2002; Ballantyne, 2003; Benton, 2008).

Parents are their children's first teachers, and parents in the study took the occasion of the museum visit to teach their children in various ways. These included the use of analogies (Valle & Callanan, 2006), connections between what they saw and their prior experience (Patterson, 2007), as well as general opportunities to exchange information across generations (Diamond, 1986), or adopt a co-investigative role while exploring the museum (Gutwill & Allen, 2010). Parents also used the museum's resources to explore and reinforce their own family identity (Rounds, 2006; Stein et al., 2006), particularly as it related to their ancestry.

While visiting the museum, family members, particularly children, briefly tried on different identities through play. This identity exploration occurred in the form of pretend play (Vygotsky, 1978; Rounds, 2006) that was conducted by a solo child or by a number of children collaborating. In addition, the children themselves may have initiated the play, or an interpreter may have acted as a scaffold to facilitate the children's play experience of living during the time of the farms they are visiting (Vygotsky, 1978). This type of play both affirms personal connections to the museum exhibits as well as represents learning through socially constructed knowledge.

Substantial prior knowledge, in the absence of signage or a costumed interpreter, may also lead families to a false sense of understanding. This is an extension of parents' natural inclination to make use of the museum for their own teaching (Diamond, 1986), but when unchecked can lead to historical misconceptions. Sieg and Bubp (2008) found many examples of these types of misunderstandings in the transcripts of families'

conversations as they walked between exhibits. This finding is somewhat contradictory to Ash's (2004) observations that family members will seek out information as well as verification of their understanding of an idea from museum mediation resources when they are available in a science museum. The discrepancy is possibly due to the family's understanding of "available." In a science museum, while there may be interpreters present in a gallery, there is almost always exhibit text a parent could refer to when testing her understanding. In a living history museum, the main option is to check her understanding with a costumed interpreter. If the interactions occur in a physical space where an interpreter is not present, it is perhaps too much effort or too much of an interruption for a family to track one down.

People interpret new and novel ideas within the context of their present interests and understandings (Dewey, 1916). Personal connections to the living history museum experience through family members' prior knowledge and identity have influence on their museum learning experiences. The influence is seen in the ways parents teach and learn with their children, the stories they tell, and the games that children play.

Family Beliefs about Living History Museum Learning

The majority of families in this study came to the museum with an agenda for an enjoyable and informative experience. Most families seemed interested in undertaking a shared exploration with family (and some friends) rather than engaging in any overt learning objectives. The two homeschool families, with a more specific educational agenda, still viewed learning as something that happened by way of their experiences with the museum farms and interpreters, not as a separate activity worthy of its own pursuit. This finding related to families' agendas resonates with the findings from the

Outdoor Living History Museum Interpretation Research Project (Institute for Learning Innovation, 2009).

Families in the present study were particularly drawn to the opportunity to see, touch, do, hear, and smell things in a living history museum. Family groups identified the experience of being in a centuries-old house, surrounded by period furnishings and watching an interpreter weave flax or cook over an open hearth, as going beyond what they could learn from reading a history book. This supports Packer's (2006) findings that visitors describe their enjoyment of a learning experience in an educational leisure setting in reference to the multi-sensory nature of the presentations. This also resonates with the previous finding that visitors to a living history museum were interested in learning about history by some means other than reading books or listening to a lecture (Institute for Learning Innovation, 2009).

This finding on family beliefs further supports Silverman's (1997) claim that public history must have personal relevance to be of value to visitors. Family groups were found to value the story of everyday people, like themselves, who had lived in the houses they visited, long ago. They also enjoyed the nostalgia of smells on the museum's farms, and the immediate tactile exploration of "touching history." Families believe that living history museum learning allows them to share the group experience of understanding history "up close."

Interpreter Beliefs about Living History Museum Learning

A limited number of studies have been conducted on historic interpreters' beliefs and practices, and much of what we do know on the subject comes from more theoretical, though practical, how-to guides, such as "Interpreting our Heritage" (Tilden, 1957), or a

few more contemporary manuals (e.g., Roth, 1998; Beck & Cable, 2002; Bridal, 2004). This study shows costumed interpreters enact many of the strategies to promote effective interpretation, which supports Graft's (2001) findings from Colonial Williamsburg focus groups.

The historic interpreters in this study identify themselves as being educators, and believe that to be successful in the job requires a love of history and people. In addition, they believe the job also involves a sense of enjoyment in talking to visitors as well as listening to the stories they share back. This meshes well with the findings from the Institute for Learning Innovation's (2009) study which reported "the ability to interact with/engage [a] group, cater to different learning styles, react to visitor wants & needs, facilitate learning [and] good people skills" (p. 26) as skills of best practice for third-person interpretation.

This research also shows historic interpreters are aware of visitor expectations of both an entertaining and educational experience. The interpreters I interviewed and observed believe that families come to the museum for a variety of reasons, from cruising through and petting the animals to a more in-depth exploration of a particular aspect of culture. Historic interpreters believe families are looking for an experience they can share as a group; one where their children will learn something about history but they will also have a good time. This supports the findings from the only large research undertaking in the field (Institute for Learning Innovation, 2009), as well as more general literature on heritage tourism (Malcolm-Davies, 2004; Rentzhog, 2007).

In regard to visitor learning, historic interpreters believe they must be selective in what they teach and do their best to meet the needs of the particular family group. The

interpreters in this study each described ways of "reading" the visitors in order to customize, to the best of their ability, the interpretive experience. This finding aligns with current best practices for third-person interpretation (Institute for Learning Innovation, 2009). The costumed interpreters also believe that smelling, touching, getting dirty, and other hands-on experiences lead to better memories from the visit for family groups. In addition, a balance of discussion and hands-on activities is the most effective way to meet the learning interests of family groups.

In the previous section I showed how the eight assertions discussed in Chapter 4 relate to the existing literature and theory concerning family learning in living history museums. In most cases the findings support those from previous studies. Much of the literature on costumed interpreters' beliefs and practices is theoretical or practical, and as such there is very little empirical research to consider. It is hoped the findings from this study can begin to address this gap and will enable others to continue the investigation. In the following section I will consider some more practical implications of these findings.

Implications for Practice

The results of the study have functional implications for both family groups of visitors and for living history museum professionals. I first identify some practical advice to help families make the most out of their living history museum visits. I then offer some suggestions to help both historic interpreters and museum administration strengthen the family learning experience.

Implications for Family Groups

Families have the best experiences when they can take full advantage of the exhibit

and the historic interpreters that staff it. The simplest way to do this is to gain the exclusive attention of an interpreter. If there are many other visitors present, and families have time and are interested, they should remain at an exhibit and talk with an interpreter one on one, once the crowd clears. If time is at a premium, families can continue on through the museum and, at the end of the visit, if time and interest still allow, go back and revisit a farm later in the day. Other suggestions for quality interaction time include visiting when the weather is not absolutely ideal, particularly if it is just a bit rainy or the weather is not nearly as severe as the forecast has called for. Families are likely to have a better experience if their family is the only group talking with an interpreter for at least a small amount of time.

It is always beneficial for families to check their understandings of everything, from use of objects to grand scale history themes, with an interpreter, even if they are not interested in listening to a standard presentation. Families should let interpreters know what they are looking for, and, to the best of their abilities the interpreters, will, or should, give them just that. Similarly, if a family member is seeking a hands-on experience, like fetching water or carrying wood, and an interpreter presumes they'd rather discuss primogeniture, visitors should let the interpreter know what their interests and intentions are. Most interpreters would rather help families have the experience they are looking for than dwell on interpretation that is not appreciated (Graft, 2001).

Implications for Museums

Exhibits and interpretive programs should be conceived and designed with as much interactivity and opportunity for hands-on explorations as possible. Pretend play should be encouraged when feasible, especially with children, to spark their imaginations.

While activities like storytelling and demonstration both support learning, they should be reserved for use with larger groups, when the potential for personalized interactions is considerably limited. The more options family groups have for interaction – by asking questions, by sharing stories, or by trying their hand at the work of the day – the greater the possibility that the visit will be memorable and what they learn will be relevant and meaningful.

Museums should focus on staff development that stresses flexibility in interpretation. This is crucial, as the museum visit largely hinges on the success of these encounters. An expert interpreter brings much to the conversation, while an amateur can leave visitors cold. The biggest challenge to living history museums will be the hiring, training, and retention of skilled interpreters. An excellent apprenticeship program, the availability of quality mentors, and continuing professional development opportunities are critical for establishing and maintaining interpretive excellence. A higher quality interpretive experience will better support visitor learning and meaning-making.

In times of shrinking budgets and staff reductions, finding concrete ways to continually improve and refine costumed interpreters' practice is challenging but necessary. From an organizational perspective, integrate a theory-driven pedagogical approach as part of the master interpretive plan. While the ultimate interpretation style is still at the discretion of the particular costumed interpreter, offer a rationale for and place value on a specific theory of how to talk with visitors. Embed constructivist techniques like activating prior knowledge and encouraging intuitive thinking and guesses into the narrative framework. Make it clear to volunteers and newer staff members that listening to visitors' stories is important, and enabling visitors to draw their own meaning from an

exhibit is permissible. The museum's narrative as represented by the historical interpreters may be authoritative, but it need not hold the locus of power.

Reading is a large component of the historical interpreters' job already. Make sure that, in addition to historical reading lists and bullet-point binders, interpreters and volunteers have access to existing research on best practices of interpretation. In addition, include high-level summaries of educational theory as applicable to museum practice, such as Vygotsky's (1978) theory of learning through play. During the off-season, spend time with the group as a whole brainstorming ways to encourage imaginative play among visiting children, and possibly ways to include their accompanying grown ups in the game as well.

On the ground, interpreters can help each other to refine their practice. When possible, staff farm exhibits with multiple interpreters and volunteers, and task the staff members with critiquing and analyzing each other's interpretation. This critique should not just be from an historical perspective but rather with an eye and an ear towards education. The observing partner should watch and listen to the interactions with and reactions from the visitors. Which techniques and engagement strategies seem to work well? What could the observed partner do to strengthen her practice? This exercise is peer-driven and intended not to point fingers or blame, but rather to help costumed interpreters be more mindful of their presentations and learn from each other in an authentic situation.

As Sieg and Bubp (2008) reported, some visitors are going to walk away from an exhibit not understanding what was said, not having asked questions that would have clarified their confusion, or not having discussed their understandings with an historic

interpreter at all. In particular, visitors with vast prior knowledge and significant museum experience may not even realize they have made an incorrect assumption or misinterpreted something they have seen. While there may not be much for the museum to do in that particular case, in other cases families do know they still have questions but do not know how to get them answered. If possible, staff the final exhibit with an extremely skillful, knowledgeable, and compelling expert interpreter who can function to check in with visitors in this regard. This final check-in might also be accomplished by way of replies to questions posed on the museum report card at the end of a visit.

Limitations

This is a qualitative research study, and as such, the findings are essentially limited to the particular participants and the setting in which the research was conducted. The results should not be generalized to the larger populations of family groups or historical interpreters, or applied to other living history museums. The trade-off to this limitation is a nuanced and insightful description and discussion of the complexities and particularities of the learning experiences of families interacting with costumed interpreters. As there has been a very limited research in this area, the findings are also useful as the starting point for further lines of inquiry. In addition to this general limitation, I also present a few specific limitations in the paragraphs that follow.

Family Group Composition

Some of the limitations of this study were likely a result of conducting the research during a different part of the year as compared to the original pilot work (Craig, 2008). While family groups that met the inclusion criteria were comparatively plentiful in the spring, these same groups were much harder to find at the museum during the

summer months. Visiting family groups during the summer were composed more often of grandchildren and their grandparents, without the intervening parental generation. When parents were present, family groups would have not been able to participate because they contained one, or usually more, children under the age of seven. Even when a group had parents and no young children present, the group was often so large, including instances of multiple families visiting together, that it would have been impossible to meaningfully observe them interacting in the museum.

Age of Participants

While the study was originally designed with the thinking that a seven-year-old could meaningfully contribute to the family meaning map and therefore would contribute positively to a study on family learning, this turned out not to be the case in practice. My experience has shown that despite being functionally literate, children between the ages of 7 and 10 still have a hard time in an interview or survey talking and writing about what they know and do. This research is limited by the fact that most of the children involved were 10 and under, and the teenage boys who participated in a museum visit did not participate in any follow-up conversations or surveys. The only follow-up interview completed with an older child was with a 16-year-old girl. However, based on my visual survey of all family groups that entered the visitor center while I was observing, younger children are more representative of visitors to a living history museum. As such, without very targeted participant recruitment, it may be difficult to find teenagers to participate in this type of research.

Museum Fatigue

As mentioned in Chapter 3, the preferred route through the museum, for a variety of reasons, is currently a source of museum fatigue in visitors. To a greater or lesser extent, each family experienced some amount of fatigue, which in turn lead to rushing and skimming, during the latter part of their visit. This constraint likely limited what might otherwise have been very enjoyable and informative experiences towards the end of their time at the museum.

Weather

Living history museum visitation is closely tied to weather. This summer was very hot for weeks at a time, and then other days it rained heavily. In addition, the area in which the museum is located experienced both an earthquake and the side effects of a hurricane during the time I was collecting my data. All of these extreme weather conditions tend to keep visitors away, and made data collecting a challenge. Visitors who did come in spite of these weather obstacles, particularly when it was very hot outside, faced additional challenges. These were due to the outdoor nature of a large part of the museum and the fact the visitors were generally unprepared for it. For instance, while the museum provided water at the entrance and a sign suggesting visitors stay hydrated, many visitors did not take advantage of it. They also did not always bring hats or sunscreen, and frequently complained of being hot or worrying about getting sunburned.

Further Research

While not intended for generalization, the findings from this study suggest a few potential lines of inquiry to further our understanding of the learning experiences of families in living history museums and the practice of historic interpreters.

Two different possibilities emerged for further work with family groups. The first is to conduct a study that would include follow-up interviews with family groups more often and over longer periods of time, for example every month for six months or even a year. This type of exploration would be able to assemble a more comprehensive picture of how a family uses the living history museum experience in their lives at large, and would align well with current research in other areas as to long-term museum learning (Stein et al., 2006).

Another related possibility is a study of repeat visits to a living history museum for a single family. Again, this study would occur over an extended period of time, with the museum visits separated by six months or a year and the entire study spanning several years. The length of such a study makes it a difficult undertaking, but not impossible. This type of study would again illuminate the interplay between a family's prior knowledge and identity and the museum's narrative as enacted by historical interpreters, yielding potentially richer data during subsequent iterations.

As to costumed interpreters, a study to understand how an interpreter acquires knowledge and flexibility in practice is warranted. In particular, this work could provide an in-depth exploration of the qualities of being a flexible interpreter, and possibly suggest how living history museums could design and implement professional development programs to further these goals.

Conclusion

This research study was designed to investigate family learning experiences in a living history museum, with particular focus on families' interactions with historic interpreters. For the families and interpreters who participated in this inquiry, learning

experiences were a complex interaction between the museum's narrative, as articulated by an individual interpreter, and a family's individual agendas and preferences for interacting. Family groups tend to recall both the novel and the personal from their visit, though neither in much detail, weeks after the occurrence. Families make use of prior knowledge and the notion of identity to establish personal connections to their museum experience, and believe that living history museum learning lets them experience history up close though multisensory encounters. Historic interpreters identify themselves as educators, but believe visitor learning involves both education and entertainment, and as such they strive to balance those tensions in their interactions with families.

The qualitative nature of this work means the findings are specific to this study and do not generalize to the population at large. However, there is reason to believe this is an important line of inquiry, particularly in the little researched areas of interpretive practices, family beliefs, and long-term outcomes. Individual museum visits are comparatively thin slices of time in a person's life, and it would be unreasonable to expect a large, immediate, or significant change in any domain based on a single event. A research agenda that recognizes and incorporates this view of assessment will be of great value to the museum community, and to visitors at large.

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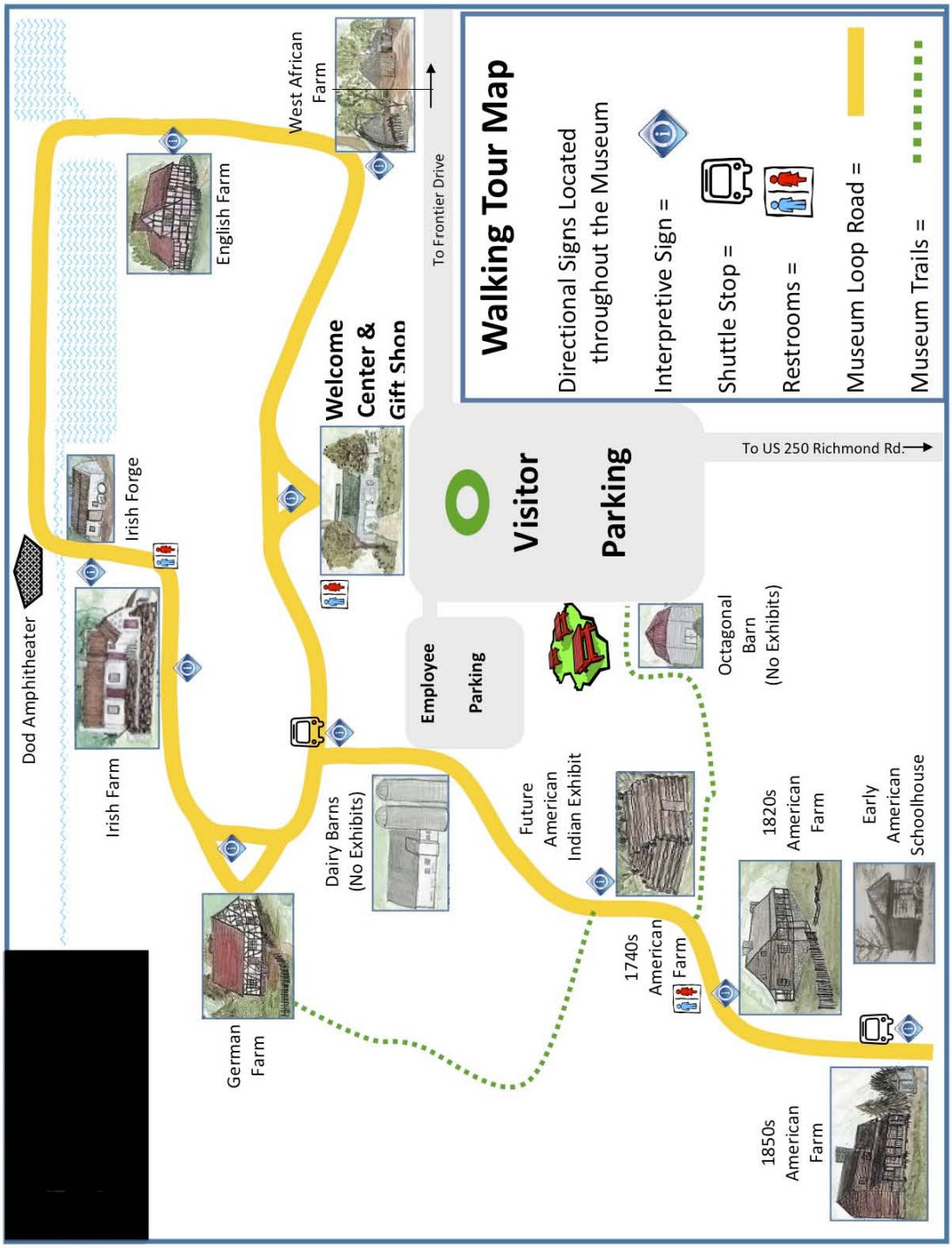
APPENDIX A

Map of the Museum



APPENDIX B

Interview Questions for Costumed Interpreters

1. Intro

   I'm here to talk to you about family groups visiting your museum…

2. Background, Previous Experience

   Tell me about how you came to work as an interpreter in this museum?
   - Previous museums? Previous educator?
   - Previous jobs like this one?

   How long have you worked here?

   What sort of training does it take to do the job you do now?
   - How did you acquire the skills/knowledge to do what you are doing now?
   - What is the professional development process like here?

   Tell me what you say to people when they ask "what do you do?"

   What is your favorite part of the job?
   - Least favorite?

   What is the most surprising part of the job?

   What do you think is the most important aspect of the job?

3. Beliefs about learning

   How would you define learning in your museum?

   What indicators of learning do you look for when interacting with visitors?

   What kinds of things do you think people learn in your museum?

   Describe to me a successful, positive interaction with a (group of) visitor(s).
   - What does it look like?
   - What makes it successful?

How about a negative interaction?
What does it look like?
What makes it a negative experience?

Visitors often learn things from you, tell me about how you learn from the visitors
Interesting personal stories?
Domain experts?

4. Family Groups

What are some of your impressions about family groups (1 or more parent/guardian, some number of kids ages 8-17) visiting the museum?

In what ways are visiting family groups unique? What special characteristics do they have?

Why do you think they come to the museum?
Personal connections?
Education?
Entertainment?

How do you decide what to talk about with family groups?

What kinds of questions do kids ask? Parents?
What kinds of questions do you ask them (kids/parents)?

How do you engage children?
Their parents?

What sort of strategies do you see parents employ with their kids in regards to visiting?
Learning?

Share some impressions of the family groups you saw today

Anything else you'd like to share?

If interpreter is also on the education committee (or for museum staff involved in education but not interpretation)

5. Tell me about what you do here at FCM…
What kind of training do you have?
How did you come to take this position?

6. In your own words, what is the mission of the museum?
   The educational mission?
   The educational goals?

7. Who is your audience?

8. Where does the curriculum come from?
   Who decides?
   Who develops?

9. How are these ideas communicated to the front-line staff?
   How is new information conveyed (updated, changed)?

10. How are new staff members trained and integrated into the front line positions?

11. Once staff members are on the front lines, how do you evaluate the educational experience they facilitate?

12. If you had unlimited budget and resources, what would you do differently/additionally in terms of educational planning and training?

13. What would you consider to be a successful visit for a family group? What would the visit look like?

APPENDIX C

Family Group Interview, Meaning Map and Survey Guides

Interview Guide for Family Groups

1. What brings you to the museum today?
    a. Have you been to this museum before?
2. How, if at all, is this visit connected with something going on in your family right now?
    a. Academically? Personally?
3. Have you been to other living history museums? Where and When?
4. How about other types of museums? Zoos? Aquariums?
5. Are you members of any museum/zoo/aquarium? Which ones? For how many years?
6. What other activities do you enjoy doing as a family?
7. What are you most looking forward to during your visit today?

Family Meaning Mapping – Pre-visit

Materials: Newsprint paper, colored markers, easel (or a wall), watch to keep track of time

Procedure

1. Introduce the activity to the family

I would like you to conduct a family brainstorm. Choose one person to be the scribe (probably a parent or other adult). I'll give you a main topic, and then I would like you to spend the next 10 minutes or so recording words, ideas, phrases, or thoughts that pertain to this central idea. The scribe should note, where possible, which family member contributed the idea by adding the contributor's initials next to the text. There are no right or wrong answers here.

Do you have any question before we continue?

2. Get the family set up with paper on easel/wall, marker (any one color to start)
3. Give them the main topic – *Immigrants to the Valley of Virginia*
4. Tell them to go ahead and start
5. Observe the process, take notes on the map based on

a. responses scaffolded or prompted by another family member

i. was the prompt something from popular/universal culture – was the prompt recognized or understood by the researcher?

ii. was the prompt something the researcher did not understand and is likely representative of more specific family culture (or another "micro" culture the researcher might not be familiar with) ?

b. responses were directly from a family member

6. If the group is working productively and enjoying the task, give them a 2 minute warning (at 8 minutes) and then let them finish up the last idea they are working on at around 10 minutes. If they don't seem to be taking to the activity, let them work for about 5 minutes and then tell them they can stop.
7. Answer any further questions, thank them for their participation so far and send them on their way through the museum, where a researcher will also be observing them.

Quick Survey – Post-visit

1. What was the most interesting thing you learned today?
2. What part (if any) did you find boring or uninteresting?
3. What was the most surprising thing you learned today?
4. What was your most favorite part of the visit today?
5. Did you do anything hands-on at the museum today? If so, what?
6. Which farm would you have liked to live on, and why?
7. What did you learn today that you'd like to know more about?
8. Do you think you'll come back again?

Family Meaning Mapping – Post-visit

Materials: Same piece of newsprint paper the family has already used, different colored markers, easel (or a wall), watch to keep track of time

Procedure

1. Introduce the activity to the family

I would like you to revisit your family brainstorm now that you've spent some time visiting the museum. The same person should be the scribe again. I would like you to spend the next 10 minutes or so expanding, adding, deleting, revising, explaining or elaborating further on any of the original ideas. Any family member can change anything on the paper, not just something he or she contributed the first time you did this. The scribe should again note, where possible, which family member contributed the idea by

adding the contributor's initials next to the text. There are no right or wrong answers here.

Do you have any question before we continue?

2. Get the family set up with the original paper on easel/wall, marker (a different color this time, so we can see which was before and which was after)
3. Tell them to go ahead and start
4. Observe the process, take notes on the map based on

    a. responses scaffolded or prompted by another family member

        i. was the prompt something from popular/universal culture – was the prompt recognized or understood by the researcher?

        ii. was the prompt something the researcher did not understand and is likely representative of more specific family culture (or another "micro" culture the researcher might not be familiar with) ?

    b. responses were directly from a family member

5. If the group is working productively and enjoying the task, give them a 2 minute warning (at 8 minutes) and then let them finish up the last idea they are working on at around 10 minutes. If they don't seem to be taking to the activity, let them work for about 5 minutes and then tell them they can stop.
6. Answer any further questions.
7. Ascertain if they'd be willing to participate in a follow-up interview in a month.
8. In either case, thank them for their participation.

Follow-Up (Likely Phone/Email) Interview – 1-2 months after the visit

1. What do you remember from your visit?
2. What specifics do you remember about stuff you did at the museum?
3. Which farm would you have liked to live on, and why?
4. Was there anything you learned about during your visit that you went home to do more research/discovery/follow-up on?
5. What happened during the visit that has influenced events in your family life?
6. How have you used what you learned at the museum?
7. Have you pursued any follow-up activities related to what you did while you were at the museum? If so, what? If not, why not?
8. Have you visited any other living history museums or historic buildings/house? If so, tell me a bit about that/those experience(s). If not, why not?
9. Anything else you'd like to share about your Frontier Culture Museum visit?