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A REJUVENATING RESORT REMEMBERED:

THE USE OF FOLKLORE AND ARCHAEOLOGY IN THE INVESTIGATION OF THE HISTORIC MASSEY SPRINGS RESORT IN SOUTH-CENTRAL KENTUCKY

A Thesis
Presented to
The Faculty of the Folk Studies and Anthropology Department
Western Kentucky University
Bowling Green, Kentucky

In Partial Fulfillment
Of the Requirements for the Degree
Masters of Arts

By Renee Pinkston

August 2014

A REJUVENATING RESORT REMEMBERED:

THE USE OF FOLKLORE AND ARCHAEOLOGY IN THE INVESTIGATION OF THE HISTORIC MASSEY SPRINGS MINERAL RESORT HOTEL IN SOUTH-CENTRAL KENTUCKY

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When I first sat down to begin writing this thesis, I did not realize how large of an endeavor it truly is or would be, not just for me as the writer, but for all of those who gave their time and effort to help me create this culmination of years of knowledge, education, and work. My idea started after attending my first American Folklore Society Meeting in the fall of 2013 at New Orleans. I was new to the field of folklore and was not sure about what I was getting my feet into but immediately found a home in the discipline and my own niche of study.

Since the inception of this idea, there have been many who have helped me either indirectly or directly in my conceptualization of what I could and wanted to do with my education. I first would like to thank those who were on the 2013 American Folklore Society conference panels who opened up the discussion of archaeology and folklore. You did not know it, but those panels on historic preservation, folklore, vernacular architecture, and archaeology spurred my own thoughts on the subject and ultimately was the driving force in me to do this research and write this thesis.

On a more personal level, I have had much help, encouragement, and influence while researching and writing. My thesis committee-Darlene Applegate, Michael Ann Williams, and Tim Evans- has been a true rock and advisory council for this entire endeavor. Darlene Applegate has been my archaeological guru and stronghold throughout this entire process. Her willingness to help facilitate opportunities for students surpasses anything that I have ever expected out of a professor and I am so thankful for the hours of her own time she gave to help me with the archaeological excavations of this site and her massive brainpower in hypotheses and site ideas. She has

encouraged me from the beginning to do the research and share my findings and ideas with others on the local and state level. Without her help, guidance, support, and care I would not be anywhere near where I am today and this thesis would not have happened.

Michael Ann Williams has been my folklore and vernacular architecture expert in residence as I complete this project. Without her help, I will admit that I would have left out many vital parts of this thesis and left in countless typos and grammatical mistakes. I am so grateful for the work she has done with me both on a personal, page-by-page basis but also in the grander scale of things. In the beginning, I could not define vernacular architecture, let alone my own interests in the subject, however, without the expertise and knowledge of Dr. Williams, I would be at a complete loss. I have learned so much from her as a person but also through her scholarly works and her engaging courses. It was through her mentorship that I began to think outside the box of previous understandings. Without her assistance, care, and compassion for students and their passions, I am not sure I would have been able to finish this project and end up with a substantial work that I am proud to call mine.

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All in all, thank you to anyone who has listened to me ramble on about mineral spring resorts and why they are amazing and vital in our historical record. My dull discussions of mineral springs and full-length verandas may have put you to sleep, but thank you anyway! With this, let's start talking about mineral springs, architecture, archaeology, and folklore!

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A REJUVENATING RESORT REMEMBERED: THE USE OF FOLKLORE AND ARCHAEOLOGY IN THE INVESTIGATION OF THE HISTORIC MASSEY SPRINGS RESORT IN SOUTH-CENTRAL KENTUCKY

Renee Pinkston August 2014 144 Pages

Directed by: Michael Ann Williams, Darlene Applegate, and Timothy Evans

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Using only one line of evidence for a study of historic sites can be problematic if it does not provide a complete picture of the material culture or lifeways of a people, group, or community. In order to understand the ideas and objects, of culture present at historic sites, it is necessary to use archaeological methodologies with vernacular architecture studies and folklore to create a more holistic image of the world and its inhabitants. To facilitate this, I conducted original research on a mineral spring resort, Massey Springs Resort (Massey Springs) in Warren County, Kentucky, a popular resort in the early 1900s. This project examines the site in terms of its archaeological resources, primary and secondary archival data, and vernacular architectural resources. Since there are no standing structures, Massey Springs is worthwhile example of the explicit need of using a multidisciplinary and integrated approach to investigate past lifeways.

CHAPTER 1: INTRODUCTION

"...objects and buildings that suture the past to the present" (Hafstein 2012:501).

"...the logic of coherent fieldwork..." (Jabbour 2003:432).

Common knowledge tells that there is not one singular way to understand everything in the world. This idea applies to our intangible world of paradigms, theories, and thoughts that float around both academic and non-academic worlds along with our tangible world of objects. For example, one cannot look at a dilapidated building and state with certainty that its builders used square cut-nails and tarpaper because they were cheaper; to make this claim would require looking into multiple resources and "frankly, the evidence is open to more than one interpretation" (Carson et al. 1981:136). For this example, your research question could center on discovering the building materials and the builder's reasoning behind using the cut-nails and tarpaper. To begin to explore this question, multiple disciplines would need to be used for investigation in order to create a whole picture of what and why, for this example. A look at the economic situation of the time would be necessary, along with distribution of building styles and techniques, cultural affiliation, and even an oral history to follow the ribbon of thought behind specific choices. In the end, making blanket statements using one line of evidence often turns out to be a faulty pursuit.

This thesis focuses on the application of academic disciplines such as folklore and archaeology and interdisciplinary fields such as material culture studies and vernacular architectural studies to examine historic structures and landscapes. This research represents a multidisciplinary approach to investigation and analysis of historic structures and sites. While working on a specific site piqued my interest when I began to work on

thee more archaeological aspects as an undergraduate; upon working towards my master's degree in folk studies, an entire new world was opened up for me which allows for a more in-depth study of material cultural and culturally shaped and used landscapes using folk studies.

The site that I used as the "case study" basis for this thesis research is Massey Springs Resort Hotel. I have used this site for the basis of my 2013 and 2014 Kentucky Heritage Council archaeology conference papers, the 2013 Western Kentucky University student research conference paper, and the 2013 American Folklore Society conference paper. For a brief summary and overview, "Massey" is located in northern Warren County, Kentucky on the Green River. The owners of this late nineteenth/early twentieth century property constructed two hotels at this location; the first, a smaller structure built upon a ridgetop and the second, a replacement structure constructed on the floodplain below the bluff. Both hotels used the Massey Spring as the main source of the healing mineral waters advertised. In a more general sense, mineral spring resorts are well known in the state, mostly in the Bluegrass Region. Fewer mineral spring resorts have been studied or documented in the western and south-central regions of Kentucky. This thesis will provide a glimpse into a part of the history of Kentucky that is not well known or documented in this area.

While taking the vernacular architecture course taught by Dr. Michael Ann Williams, I became aware of how useful archaeology could be when paired with vernacular architectural studies and folklore. I noticed that the fields fit together nicely, but for some reason I had not been reading many examples of this occurring in research. I feel that vernacular architecture and material culture studies pick up research at a point

where archaeology seems to end. It is nearly impossible to create a whole picture of the history of a people, structure, or landscape without the cooperation of these fields of study. Folklore also seems to fill a void in research, especially when dealing with subjects that are archaeological in nature. The intense use and training of folklorists in ethnography, as well as vernacular architecture and material culture studies are key research method that should be used in conjunction with archaeology. Talking to people, as folklorists are trained to do, opens up goldmines of information about space and place and how culture is involved in the creation and use of physical spaces and objects. Few examples of this have occurred in the past (or at least that have gotten attention). The best example that I have learned about during my education was the work done at Ravensford by Dr. Williams and some of her graduate students. After being consulted by a cultural resource management firm, she made the decision to work on the project in conjunction with archaeologists (Williams et. al. 2009). This example provides a solid example of the use and need of folklore with archaeology and where two disciplines can work together for a common goal for a specific site.

Folk studies and archaeology are not completely separate bodies of academic and applied constructs; rather they are distinct but complementary disciplines. Within and apart from each exist other academic specialties or interdisciplinary fields, an example being vernacular architecture studies. Each of these systems of study can exist on their own, as facets of our culture and ways to understand culture. These academic disciplines help us to view and understand our culture and help to create and answer questions we may have about what and why we do things the way we do. Archaeology can be used with folklore and specifically vernacular architecture studies to create conclusions and

test hypotheses. Folklore is rich with facets of vernacular architecture and material culture. In summary, each of these disciplines build on and require the use of each other in their methods and theories. This is easily seen on paper but in practice not so much.

The two quotes that I have included in the beginning seem to encompass specific ideas that will play a large role in this thesis. In his contribution to *A Companion to Folklore*, Hafstein, while discussing heritage writes a poignant line on heritage and artifacts, and what they do for us, which was the opening for this chapter (2012). This idea, that artifacts and buildings link us to the past that plays an integral role in my own research. Without the pieces of the past that I can photograph *in situ*, collect, and then use to compile dates of construction, there is no link between the past and present; those memories and occurrences are lost to the record. This is the same when it comes to intangible culture; the stories and literal memories of people at these sites become lost to the record without the proper link to the present. Archaeology and folklore, along with material culture and vernacular architecture studies, serve as this link, the suture that binds the wound that time creates in the landscapes and mindscapes between us now and what once was.

The second quote that starts this chapter seems to encompass the core of my argument. In his discussion on cultural heritage and changes in the field of folklore and historic preservation, Alan Jabbour notes that convergences of disciplines are important for the growth and general effectiveness of the fields. He notes that in the late 20th and early 21st centuries, signs of cross-disciplinary collaboration and communication between disciplines became apparent. This is the case of archaeology and historic preservation, as Jabbour makes clear. These signs of 'cross-pollination' help to reveal the lines between

disciplinary boundaries in the United States. With his discussion of the expansion of the field of archaeology with an inclination for including historic preservation, Jabbour notes that "logic of coherent fieldwork" (2003:432) is a needed concept. He gives the examples of archaeological sites that require protection both above and below ground and by using the work of Henry Glassie explains that this is a natural progression of the expanding scopes of work in the disciplines. It simply makes sense for disciplines that study similar, if not the same, subjects to come together in collaborative efforts. These convergences and collaborations only help to make the research conducted stronger and multifaceted in order to cover a larger range of ideas and topics. In the end, it is logical to strive to produce pieces of research that focus on multiple disciplines and cover larger ideas. A strive for holistic studies and dialogues among the disciplines and fields should be paramount to the aforementioned disciplines.

Archaeology

Simply put, archaeology is the study of things that people leave behind, either accidently or with purpose, and the ways that they "left their impact on the world" (Deetz 1977:4). A commonly accepted and used definition of archaeology is that "it is the systematic study of humanity in the past" (Orser and Fagan 1995:4). Archaeology can be a humanistic or scientific approach to studying people; it is a sub-discipline of its larger discipline, anthropology, and employs specific techniques, theories, and methodologies. Generally, archaeology is crucial because it helps us make sense of and understand our world now and what it was in the past. This includes how we use the natural world along with our culturally constructed world and what it meant or means. It is commonly

thought that science is a method one could use to search for missing parts of the past or present in a way that is measured, unbiased, and truthful. In many cases, archaeology is not unbiased or equal; only the methodologies are based in 'pure' science. But, archaeology is a solid research tool to use when hoping to discover the past.

Archaeology is different from history as a discipline because it focuses on artifactual evidence and involves the "collection of data through excavation (which is not archaeology's only field method) and the integration of the data recovered by placing it in time and space and ordering it according to some type of classification" (Deetz 1967:9). I add in history here for just a slight pause to make clear that archaeology does look at historic pasts, but the approach and methodology is much different. Overarching the discipline, there are two types of archaeology based on time and the invention of writing or contact with non-indigenous peoples, prehistoric and historic. Prehistoric archaeology deals with cultural materials that predate written history within a specific region (Sutton and Arkush 2009). Historic archaeology¹ studies cultural materials that come after societies become literate (Deetz 1977, Sutton and Arkush 2009). For this research project, the focus is on historic archaeology.

In its earliest years, historic archaeology was a somewhat ambiguous subfield of archaeology, often, scholars were not sure where it fit in (Orser 2001:621) partially since there are no universal time ranges that delineate the "historic period" whereas in prehistoric archaeology there are, although sometimes rough end and beginning dates that bind the subfield. While historic archaeology was still being conceptualized and

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¹ In the past, as detailed in Orser and Fagan (1995), historic archaeology has been defined as the study of a period of time, the study of the modern world, and a method of study. In this same source, however, historic archaeology is defined as being multidisciplinary (which I have not done here).

defended as a worthwhile subfield, it was known by several other names, including historic site archaeology and colonial archaeology (Orser 2001). While there were still problems with accepting a formal name for the subfield and figuring out how we could study our historic past and see it as just as worthy as the great civilizations in the East, changes in the United States helped to facilitate the acceptance and study of historic archaeology. In 1935, the Historic Sites Act was passed in the United States. This act made clear in its title the importance and equivalence of historic sites and prehistoric sites in the United States (King et. al. 1977).²

Historic archaeology, like its sibling prehistoric archaeology, experienced a substantial change in the 1960s with the development of the New Archaeology or processual archaeology. Archaeologist Lewis Binford is often credited with formulating processual archaeology using fellow archaeologist Walter W. Taylor's idea that added anthropological research to archaeology. Within this new, processual framework, the divide between prehistory and history fell away and a focus was put on culture process and anthropology was put into archaeology (Orser 2001). This framework persisted in many well-known historic archaeologist's work, including James Deetz³ and Stanley South. Deetz often advocated for overt application of anthropology into archaeology and South, while somewhat being in agreement with processual archaeology in that archaeology was a part of anthropology, also went against the same idea of anthropology in archaeology (Walker 1974). Processual archaeology was later countered with post-processual archaeology in the 1970s and 1980s. Post-processual archaeology puts more

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² For a more in-depth discussion of the early history of historic archaeology, see Orser 2001.

³ Although Deetz is known for his work in historic archaeology, it is important to note that he began his career as a prehistoric archaeologist.

emphasis on individual meaning into context and meaning (Mrozowski 1993) instead of doing away with temporal context like processual archaeology. While historic archaeologists found a place in processual archaeology because of the emphasis on adding anthropology in their studies, they also found a solid place in post-processual archaeology as well. Here, because agency meaning was emphasized, more studies could be focused on social and cultural conventions that were significant in history. Class and gender were two such conventions. Nonetheless, we should not forget that at its heart, all archaeology focuses on context.

Currently, there seems to still exist some contention between prehistoric and historic archaeology. Sometimes historic archaeology is looked to as a "junior partner or youngest child in archaeology's family history," however, today historic archaeology "dominates the practice of professional and contract archaeology across the globe" (Gilchrist 2005:330). Along with this problem within archaeology, historic archaeology has also faced problems in the past with its reputation as being part of history, when, just as discussed above, the two are completely different in their approach and methodology. This was a top discussion point in the 1970s and was the subject of many debates (Orser 2010). Historic archaeology is a vital area of study because it seeks to re-examine the common past that we think we know and shed new light onto it. ⁴ Historic archaeologists are specifically called out in some cases because of the use of documents as evidence,

⁴ I have noticed that journal articles from the late 1990s and the early 2000s make clear that some sort of contention between prehistoric and historic archaeology was heavily prevalent in scholarship and studies. Some scholars believed this to be centered around the availability of documents for use as evidence and that historic archaeology was not really uncovering anything new for the public to learn. I would argue now however, that this may still be occurring but historic archaeologists are doing a better job at shedding light on the themes held in the historic archaeological record that deal with ideas of race, gender, class, and status. (Gilchrist 2005).

which has sometimes led to particularistic historic archaeology, which lacks the development of theory. While this is often cited as a problem of the field, historic archaeologists have offset this perceived problem by being some of the first to study and publish on topics such as gender, ethnicities, and sexuality (Gilchrist 2005:4). Now however, the move in historic archaeology has been to address larger historic narratives of the past and specific periods (Gilchrist 2005:5). I feel as though this research project, while it does not explore a historic narrative as large as slavery or consumerism, does represent a smaller scale, but still grand narrative of consumerism, capitalism, and economic and social improvement in south-central Kentucky with relation to the mineral spring resort industry.

At the most fundamental level, archaeologists study the archaeological record, which can be a single artifact or a collection of related material remains comprising a site. A *site* is a place on the landscape where there is evidence of past human activity. A site is geographically bounded and/or temporally bounded. There are many types of sites, in fact, studying the function of the site and activities that may have occurred there can tell us types of sites (Sutton and Arkush 2009). A fortunate element of historic sites is that identification of materials, functions, and activities is sometimes much easier than at prehistoric sites because many of the same materials are still being used. It is much easier to see farm equipment and realize that farming occurred at a site versus finding ground-stone tools at a prehistoric site and coming to the same conclusion. In many cases, we are able to identify historic materials much easier than prehistoric materials and historical archaeologists can often use written documents too.

At the heart of archaeological investigations are the smallest parts, the artifacts. An artifact is generally any object that is made, modified, or used by humans. These pieces of material life left behind or discarded are thought to embody culture (Upton 1985: 66). Artifacts can be nearly anything, a ceramic vessel, a butchered animal bone, a shoe, or a shard of window glass. All of the artifacts collected from a site⁵ are known collectively as an assemblage (Sutton and Arkush 2009:7). Assemblages can be broken down into types and both qualitative and quantitative data about these collections, give insight to the site studied. As mentioned previously, artifacts and assemblages that are labeled historic are more easily identifiable today than prehistoric elements because much of the technology and/or form has not changed to make things completely foreign.

Within archaeology, there can be several different techniques and methodologies one could employ to study the past as well as ways to conceptualize historic archaeology. One such different way to view historic archaeology is known as text-aided archaeology (Orser and Fagan 1995). This is exactly what it sounds like; archaeology is done with the aid and use of historical texts and documents as forms of evidence. Texts become primary sources and excavating through the piles and stacks in archives becomes a skill just as crucial as excavation of the earth. Text-aided archaeology is an important method used in this project with the reliance on documents and texts as forms of evidence to help create, test, and sustain hypotheses.

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⁵ Archaeological sites are conglomerations of features (and other scattered materials). Formally, archaeological features are discrete occurrences within a site that represents an event and that cannot be removed without destroying or disturbing the integrity or relationships of that feature and the site (Sutton and Arkush 2009). Features can vary in size and can represent actual structures or constructions on the landscape like an entire building or specific parts within a structure, such as a hearth or a refuse pit.

Not just physical documents are used for this type of archaeology either. In most cases, oral histories are used as sources of information and often aid in the creation and testing of hypotheses for historic archaeology sites (Little 1992). Oral history has proven to be a valuable resource for adding to or changing interpretations of our past. Oral histories are also heavily used in other disciplines and fields of study such as folklore and vernacular architecture studies, as described below.

Folklore and Folk Studies

As a student of folklore, I have been questioned about my discipline and what exactly folklorists study. I have to admit that in the beginning of my degree I could not answer that question myself. My background is in anthropology and archaeology which have a tight definitions and explanations of what we studied, however folklore does not seem to have this safety net. In the most general sense, folklore is the study of the culture of a group, which sounds a lot like anthropology, however, folklore is special and different in that a very specific interest is taken in the expressive aspects of a culture that is usually passed on orally or by behavioral example. Folklore tends to be what people hold on to as part of their identity.

Like other disciplines, there are often disagreements and differing points of view of what is being studied or what the foundation of the discipline is along with a tumultuous history. Folklore is not exempt to these problems. The first roots of the discipline began early with the collection of relics of a collected past, including the work of well-known figures such as the brothers Grimm with their collection of *Kinder* and *Haus Märchen*. Folklore began to grow and develop and in 1846 when the term

"folklore" was defined. Eventually, folklore grew into two camps of scholars, those focused in the literary field and those focused in anthropology. This created a great schism in the field that can still be felt today.

Of course, theories, perspectives, and methodologies have changed over the years. In the early years of the discipline there was an insistent need to collect things that were in danger of disappearing, often from marginal groups such as Native Americans and African-Americans. Later, scholars recognized that folklore was not just in marginal groups and so they began to look at other groups within the United States. In the late 1960s and 70s many changes impacted the discipline. In the 1960s scholars Don Yoder and Warren Roberts began to advocate for the inclusion of material culture in the study of folklore as well as a more holistic perspective modeled after similar disciplines, such as Folklife Studies in Scandinavia. Folklorists later began to push for a new movement colloquially known as 'The Performance Movement' in the 1970s. During this time, upcoming scholars were questioning previous foundations of thinking in folklore and folk studies. Context became a key factor in the study of folklore and the discipline began to look at broader events and 'lore'. Scholars continued this paradigm shift into the late 20th century and on into the 21st century. Thinking on theories specifically, the field has been subject to a plethora of theoretical perspectives and leanings. While folklore has a very slim set of theoretical perspectives that have come directly out of the field, we tend to borrow and adapt others over the years. It is common to find monographs written with structuralist slants, functionalist followings, and post-modern perspectives within folklore.

Folklore studies has changed over the years in focus, application, and theoretical basis; this is partially what makes this discipline so versatile in not just this study, but also many others. Folk studies has turned into a moldable conduit for understanding who we are but also where we came from. In the case of this thesis, I consider folk studies to be a sort of 'mother discipline' in the same respect as how I consider archaeology. Like other disciplines discussed here, folk studies is broad and overarching; it can encompass material culture studies and vernacular architecture studies.

Vernacular Architecture Studies

Oftentimes, vernacular architecture studies seems to be the strange fruit of multiple disciplines and multiple generations that gets left out and adopted back in when needed. This discipline is a strange one, a sort of puzzle piece that fits into many other disciplines and can be approached from many angles depending upon where you start. One of the base "problems", like folk studies, is the lack of a concrete definition of what it is scholars of this discipline study.

Vernacular architecture scholarship descended from the work of cultural geographer Fred Kniffen and his idea that scholars might be able to use folk housing forms to track the course of a migrating culture. According to scholars, buildings and structures embody evidence of cultural patterns and use in their form, plan, and style. Today, the discipline of vernacular architecture studies has been stretched to include recording and analyzing structures of every age, form, and function; essentially all architectural spaces (Wells 1986).

Carter and Cromley in their 2005 text, *Invitation to Vernacular Architecture*, define the focus of the discipline as "the common form of building in a given place and time" (2005:13), along with this, vernacular architecture is pervasive and common. The largest problem for this discipline has been not what architecture is but what the word 'vernacular' means. The Vernacular Architecture Forum (VAF), a professional group of scholars and students, makes clear on their website that problems have existed in the past with defining what exactly scholars of this discipline study. According to VAF, vernacular architecture is the study of ordinary buildings and landscapes (Vernacular Architecture Forum 2012).

Scholars of vernacular architecture are often split between what the term "vernacular architecture" is.

Some scholars remain loyal to the conventional view that vernacular buildings must be old, rural, handmade structures built in traditional forms and materials for domestic or agricultural use. Embedded in – or sometimes explicit to – this stance is the notion that vernacular buildings are the fragile remnants of a preindustrial, agrarian time when life was more cooperative, more humane, and through manual labor, somehow more noble than the alternatives. (Wells 1986:1).

While this quote embodies one of the stances that is used to describe vernacular architecture, its counter argument is the opposite in that vernacular architecture does not have to be old, rural, and handmade but rather embodies a way to view the structure rather than only examining the physical structure. Wells states that vernacular architecture is more so "the concrete results of architectural decisions made by common people in the course of ordinary lives" and more broadly, "the study of vernacular architecture is part of a larger academic concern for what can be learned from all sorts of things that people make and use" (Wells 1986:1). Dell Upton, a respected scholar notes that the name *vernacular architecture* is inadequate and has no clear lines that make its

study distinct or non-confusing. He makes a clear point to note that it has been studied from a wide range of other backgrounds and disciplines, including "art and architectural history, social history, folklore, anthropology, historical and cultural geography, architectural theory, and sociology" (1985:57-58).

Although he never formally announces his definition in the text, Henry Glassie discusses the vernacular architecture of middle Virginia in one of his most well known texts (Glassie 1976) and his more new text *Vernacular Architecture* (2000). Here, Glassie examines what would be considered 'vernacular' to the region. Glassie was inspired by James Deetz's *Invitation to Archaeology* (1967). Deetz was impressed with Glassie's work in American Studies and after meeting of the American Studies Association in 1969; the two became good friends (Brown III 2004). Maybe these two men could represent the joining of two great disciplines. Deetz's work has also inspired others in the discipline, Carter and Cromley (2005), also borrowed the title of *Invitation to Vernacular Architecture* from Deetz's *Invitation to Archaeology*.

However, in *Folk Housing in Middle Virginia*, Glassie looks at the structures as artifacts of the "mind of the builder" while other scholars such as Michael Ann Williams in her text *Homeplace*, also examine vernacular architecture but from a different perspective; while Glassie is looking at extant structures and their abstract grammar, Williams looks at memories of structures and their social use (2004), both of which are part of the 'vernacular' in vernacular architecture studies.

So, going back to an actual definition, it is important to understand what the word 'vernacular' means and a brief historical timeline of the discipline. First and foremost, vernacular is defined as "1: or, relating to, or using the language of ordinary speech rather

than formal writing; 2: of or relating to the common style of a particular time, place, or group" (Merriam-Webster 2014). Here, it is evident that this term is based in language studies but has been adapted to fit other areas of interest. In theory, the term vernacular could be applied to nearly anything to denote a common form of whatever the term is applied to: vernacular food, vernacular music, vernacular hairstyles; all of these topics with the addition of the key word indicate a common style that is bound in time and space. With this basis, the previous definitions of vernacular architecture make sense. Often times, the term *vernacular* is often used interchangeably with the term *folk* to describe this specific type of architecture (Lawrence 1983). Although it is obvious that some scholars such as Henry Glassie and Simon Bronner use the idea of vernacular architecture as folk architecture and folk objects, I accept this use but do not use it in my own practice.

Vernacular architecture study is a relatively new field. The term *vernacular* itself was applied to architecture in America based on the previous scholarship by the English "Vernacular Architecture Group," founded in 1952 to "further the study of traditional buildings" (VAG 2014). The discipline seemed to gain its grounding and following in the 1970s and 1980s in the United States as an emphasis on the common history of people began to grow, although its roots stretch back to the late 1880s when architects began to document disappearing or soon-to-disappear structures. Taking inspiration from the earlier English organization, the Vernacular Architecture Forum was founded in 1980 "to encourage the study and preservation these [architectural] informative and valuable material resources" (VAF 2012). It is important to note here that the development and growth of vernacular architecture studies, as a discipline is really an effort of the

comingling and growth of multiple disciplines including those already discussed.

Vernacular architecture studies seems to be another bridge between disciplines, just as material culture studies is; architecture can be seen as a product of the material culture of a group, vernacular architecture is also in the purview of folklorists. Historic structures considered vernacular architecture can be under the scope of historic archaeologists but vernacular architecture itself is not part of historic archaeology.

Vernacular architecture has been called a phenomenon that is understandable but not definable and is really a compilation of is and is-nots; non high-style buildings, structures not designed by professionals, non-monumental works, unsophisticated structures, and not architecture (Upton and Vlach 1986). Along with this, vernacular architecture can be seen as less about actual physical structures and more of an approach to building and studying structures (Carter and Herman 1991: 3).

For this project I have created my own definition of what vernacular architecture is: the structures of the built environment, which are often localized or regionalized and embody some vernacular or folk perspective(s) or idea(s). This seems very basic at first, however it is broad enough to exclude some sorts of building techniques and types but to include regional variation in the forms and features as well as styles. This is also an important side note for this thesis because, it is a second goal that at the finale of this text, I will outline the specific architectural features and/or styles that are 'normally' aligned with the types of historic mineral spring resort hotels, such as Massey Springs and others in the area. My hope is to delineate a specific style-type for these structures since, as far as I have found, there is no specific style or form outlined that defines this specific type of vernacular architecture in this region.

I believe this is an important point to make because styles of architecture can be mass-produced and not actually vernacular in nature, as formally defined. However, most contemporary vernacular architecture scholars are shying away from the staunch distinctions of what is vernacular and including the mass produced as vernacular as long as they are considered "common". Hubka demonstrates this issue clearly in his text Houses Without Names (2013) where even though a large portion of everyday architecture in the United States is mass produced and not "vernacular" as it would have been defined 20 years ago, because it is common to the people it is, in fact, vernacular according to contemporary use and description. In most examples that I have for myself, the "vernacular-ness" of a structure is not an aspect that is "real" or has been designated as "the vernacular architecture feature" but rather if a mass-produced construction that plays into ideas and conceptions of a people. I tend to follow the same mindset of Hubka where mass produced can be vernacular. For a structure to be an example of vernacular architecture, it must have a form and plan that make sense for its creators and users, but also have some sort of continuation of ideas of architecture that are embedded or even inherent for a community or group. For me, vernacular architecture is more of a feeling and an approach to studying structures, not just a designation that is based solely on tangible structures and their form, plan, and styles. For this thesis, I hold that the application of vernacular as a descriptive adjective to the hotels that I have studied comes with the fact that, as I will demonstrate later, the style of the structures is actually a conglomeration of features and other styles. This, for me, is what makes these structures 'vernacular'. It is the regional use of multiple styles molded into one style used in these

structures; they may use formal forms and features, but they exude regional perspectives and ideas about construction and form.

Material Culture Studies

Material culture studies is more difficult to define simply because what this discipline is constantly changes, as the definitions of culture and material culture evolve. However, Thomas Schlereth (1982), a professor of American Studies at the University of Notre Dame, defines material culture study as the act of studying pertinent parts of our culture, such as values, ideals, attitudes, and assumptions, using artifacts and other objects. Schlereth states that material culture studies is not the only term used, but rather it is part of a collection of identities coined by scholars this discipline takes on, including John Cotter's above-ground archaeology, Richard Dorson's physical folklore, and Robert St. George's material life (Schlereth 1985). Its task is to "explain why things were made, why they took the forms they did, and what social, functional, aesthetic, or symbolic needs they serve" (Schlereth 1980a:3). In an article written by Deetz that juxtaposes archaeology and material culture studies, he states that "archaeology is the discipline or subdiscipline, and material culture – this is artifacts- is the set of most culturally sensitive data available" and that "material culture is culturally patterned data which provide the archaeologist with insights to life in the past" (Deetz 1977: 10). The commonality between these terms and the others given in Schlereth's text is the focus on material things and objects of culture rather than the ethereal ideas of culture. In the end, material culture studies is a plural discipline; plurality in material culture studies is implied in that

it automatically, with the nature of its subjects, covers multiple disciplines or it is just a type of research that is done in multiple disciplines.

Plurality can be seen as a blessing within a discipline; however, it can also be a problem. In the case of material culture studies it is both; plurality in the discipline helps keep a constant flow of changing ideas that can either support or challenge each other. While this does seem like a problem, it can help keep a constant check on ideas used in a discipline and help facilitate renewal of ideas and topics. On the other hand, plurality can be a problem because it can create an unstable foundation for explaining exactly what the discipline is. This foundational problem can create weak points and cracks. It is these weak spots in explanation of material culture studies, specifically what is studied here and how, that other disciplines can occupy and support.

While archaeology studies artifacts in the archaeological record and uses time divisions, there is no real division of material culture studies-which also studies artifacts-by time units. What is often - if not always - studied in material culture studies is historic in nature; perhaps this is because scholars feel that archaeologists are better equipped to study and interpret prehistoric materials. Also unlike archaeology, material culture studies scholars or specialists do not employ excavation techniques to retrieve artifacts and further, they do not generally look at relationships of features and assemblages to each other or an entire site, but rather, what the artifacts say about a culture. Instead, material culture specialists seek patterns (Glassie 1999) in groupings of artifacts, not just singular pieces and the patterns that become evident when examined in context to make further conclusions. This is not to imply that archaeologists do not study larger patterns; this is inherently what they do with artifacts and assemblages. Rather, material culture

specialists often do not have the expertise and skill to study singular artifacts to extract data and meaning from them like archaeologists can; they must rely on only the larger picture. However, it is also pertinent to realize that while material culture specialists do not excavate, per se, they have collaborated with archaeologists in the past. The most famous example of this collaboration was used to further understand impermanent architecture of the southern colonies in the United States (Carson et al. 1981). This example is well known because it demonstrated how architectural historians and vernacular architecture scholars had to rethink the nature of architecture in the Chesapeake because of the archaeological evidence that was being discovered. Another example of the use of material culture to study a community or region to improve understanding is that presented by Schlereth. Here, he demonstrates that there are multiple ways to study an area and using them together is seemingly better than apart (Schlereth 1980c).

When thinking about material culture in these ways, it is clear that it cannot be a single discipline that is used for examination or study of cultural remains. In a way, material culture studies extends the artifact analysis that takes place in the archaeological laboratory or, on the other hand, archaeology extends material culture studies back to its points of origin in the soil. Nevertheless, it is not only archaeology that material culture studies can comingle with effectively. "American folklorists and historical archaeologists have also considered material culture as important points of connection between folklore and anthropology" (Gazin-Schwartz and Holtorf 1999:10); it tends to bridge gaps on its own since the range of topics and interests covered by both often coincide. Folklore and archaeology specifically are two disciplines that are commonly

not put side to side. In past articles written by scholars of both fields, this case has been examined. Glassie is known for an article he wrote for a special issue in 1977, which looked at both archaeology and folklore in a broader scale. His piece notes that while the two disciplines are often in juxtaposition, their locations in general are what make them both strong and that using folklore and archaeology side by side can help scholars obtain a complete picture of the past and lifeways rather than one that is one-sided. I appreciate that Glassie is not afraid to compare these two and point out that "if the archaeologist does not dig, or the folklorist does, [the] pursuits verge near identity" (1977:23). As demonstrated here later, other disciplines and research techniques and materials such as documentary materials (Schlereth 1985) can help expand and expound on conclusions drawn from cultural material.

A Puzzle of the Past

As we have seen, disciplines do not have to be separate entities all the time; many can co-exist in a harmonious fashion while actually adding to each other. Some disciplines fit better together than others, or the fit seems more natural. In the end, however, I believe that the holistic picture created from the synergetic disciplines exists because each falls into a much larger category that deals with history and heritage of humans. Other examples of work that combines these different fields of study do exist. Scholars proposed a "total-culture" study of communities or regions that would combine a multitude of cultural ideas into one holistic study (Bronner 1985: 133). Gregory presents a compelling case that examines the historic land use of an area in western

documents is a pertinent and possibly the only way to study this area and gain such a complete idea of the past lifeways and land use (Gregory 2002). There are other examples of holistic studies that use oral history as an integral facet to add to the examination of culture; these examples are discussed later in this thesis. While my focus here is not explicitly oral history, I feel that it is still important to make clear other ways in which multiple disciplines have been used together in past projects.

As alluded to, I see archaeology and folklore or folk studies as being the two overarching categories within this multidisciplinary paradigm. Under the two major disciplines or archaeology and folklore, I would include, subdisciplines such as vernacular architecture studies. Vernacular architecture studies could exist under both categories of archaeology and folklore but would encompass different aspects or perspectives. In general, architecture and structures is a place where disciplines like folklore and archaeology overlap if thinking about material culture specifically. To make this easier, I created an illustration of my division of these disciplines, which also maps the interrelatedness of each (Fig. 1).

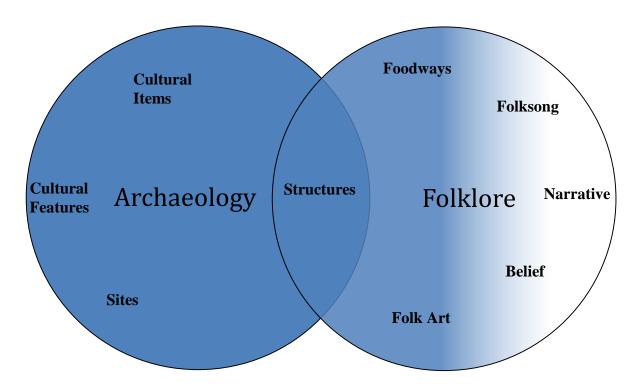


Figure 1. Venn Diagram Illustrating the Interconnectedness of Folklore and Archaeology. The shading corresponds with the degree of material culture foci; the darker sections focus more on material culture whereas the lighter sections do not. The research project represented here falls at the intersection the two disciplines.

To further explain this graphic and my approach, I will discuss what it is that I have teased out from each discipline as the crucial gain(s). Faint traces of both vernacular architecture studies and material culture studies are found as parts of both the major disciplines; they are well represented fields of study because of their plasticity and that of the major disciplines, archaeology and folklore as well. In my approach, I use the more physical aspects of vernacular architecture within the archaeology category and tend to waiver onto the more social aspects of vernacular architecture within folk studies. The archaeology side will look at the physical remains of historic architecture and explain how to locate and understand them, whereas folk studies will look at the standing structures while taking a more socially-centered approach to understand the 'folk' or 'vernacular' aspect of vernacular architecture. Archaeology and folk studies come

together agreeably within vernacular architecture studies in the demonstration of locating these structures and explaining their actual and social use and construction. This demonstrates the pure need for the study of vernacular architecture from both sides of the fence and the blatant lack of information and understanding if only one group studies vernacular architecture.

Material culture studies, like vernacular architecture studies, falls into the same situation; it is a field of study that is applied to both archaeology and folk studies and has different and/or similar results in the end. In this thesis, material culture studies and archaeology fit together effectively in that archaeology essentially is the study of material culture or artifacts left behind in the archaeological record. The line between archaeology and folk studies in material culture studies is a hard one for me to draw at times; I have come to think that the archaeology-based approach side of this line focuses more on the physicality of material culture whereas the other side of the line ruled by a folk studies approach tends to focus more on the human aspects of material culture, so aptly named 'folk studies'. It tends that both approaches look at and may even dwell on patterns within material culture; archaeology may focus more broadly and folk studies may not, but this is probably not always the case. Material culture studies, just as vernacular architecture studies, is a very fluid topic of study.

However, it is important to realize that looking at vernacular architecture and material culture is not only possible using the lens of either archaeology or folk studies. Moreover, it is vital to realize that these two fields of study can also be stand-alone approaches and have their own banks of scholars, texts, and theories. In no way have I covered all the individual topics central to each discipline listed above or will I ever. The

approach taken here is only a figment of my conceptualization of the disciplines and the invisible lines that bind and connect each of them together; it represents how I have seen these concepts and fields interact in my education and my research. One of the fascinating issues with research and studies of this type is that there is not one permanent way in which to go about the research. One could easily recombine and mix aspects of each discipline and approach in order to create an entirely different schema; however, in the end, it would probably still represent a more holistic picture of the past than using only one discipline of study. Going back to the heading of this section, these disciplines are similar to puzzle pieces that all come together in the end to create one full, holistic picture of the past. Sure, these pieces can exist on their own and you may be able to make out specific things on each piece, but make little since when looking at the entire picture. In the end, they must all fit together to work correctly.

Since I have expounded upon the approach this thesis will follow, now it is essential to describe how and why this research project was formulated. In the beginning, I had little idea of what I was going to study for my thesis project or how I was going to do it; all I knew was that I wanted to use folk studies and archaeology together in a holistic study. The site that I use as my case study for this project was a complete shock and blessing. As an undergraduate in archaeology, I completed my required summer archaeology field school at a site in south-central Kentucky adjacent to and on the same property as my case study site. With the help of my outstanding mentor and professor, Dr. Darlene Applegate, I was able to procure permissions to work at the Massey Springs first hotel and use it as the center of my research.

I have read studies of historic sites completed by archaeologists and folklorists, but I have seen very few studies done with both in cooperation. With the help of another brilliant mentor and professor, Dr. Michael Ann Williams, and her course on vernacular architecture, I began to expand my own thoughts on how these two disciplines should and could work together. During an unexpected conversation about my interests with Dr. Applegate while on our way to the Massey Springs site, my thesis idea was born. It simmered for a few months but it came back up during the 2012 annual American Folklore Society meeting during a panel discussion among vernacular architecture specialists, folklorists, and National Park Service personnel. In the end, a distinguished scholar in vernacular architecture and member of the Vernacular Architecture Forum came forward to make a comment on the use/need of archaeology within the discipline. My brain immediately clicked and I knew that was it. I found myself in a weird situation; I am an archaeologist working towards a degree in folk studies...as a metaphor, I was becoming the bridge that I had longed to see in the disciplines, and so this thesis is like the framework of that bridge.

Thesis Overview

Now that I have described the approach and rationale of my multidisciplinary research project, I outline the remaining parts of my thesis here. Chapter 2 focuses on the site of a historic mineral spring resort hotel, Massey Springs Resort Hotel, my case study. It begins with the location of the site, including the physiographic setting and the importance of this specific type of site to Kentucky. Chapter 3 describes my multidisciplinary approach and outlines the archaeological and folkloristic methods used

in my research project. Results are presented in Chapter 4, beginning with a brief overview of findings and progressing into more detailed descriptions of conclusions going by each discipline used and each of the two historic Massey Springs Resort hotels. Findings here include dates and materials of construction using archaeology, construction materials and architectural form using vernacular architecture studies, social and spatial use using folk studies, and general cultural patterns using material culture studies. In the final chapter of this thesis, Chapter 5, we will make a move back to folk studies and have a more in depth conversation about the discipline and towards what and where future academic work and study can move.

CHAPTER 2 EMERGENCE OF A SPRING, AN EXAMPLE IN CONTEXT: MASSEY SPRINGS RESORT

There is a plethora of springs in Kentucky, especially in areas with karst geology. A spring is formally defined as "a place where ground water flows naturally from a rock or the soil onto the land surface or into a body of water" (Bates and Jackson 1987:637). In addition to freshwater springs and salt springs, another type of spring is mineral springs, or naturally flowing waters saturated with specific minerals, elements, or compounds picked up by the water from the bedrock and soils through which they pass. Though they occur in all physiographic zones of the state, mineral springs are most common in the Mississippian Plateau, Western Kentucky Coal Field, and Bluegrass provinces of Kentucky (Fig. 2).

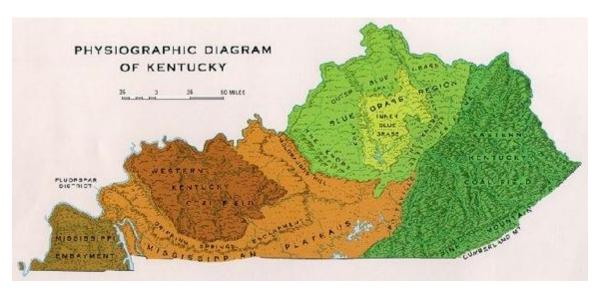


Figure 2. Map Showing Physiographic Provinces of Kentucky (Kentucky Geological Survey 2014).

Mineral springs are natural geological features that served as sacred and special locations, as well as everyday and utilitarian places, for both Native Americans and early settlers. Often, archaeologists discover archaeological sites that are ceremonial or

utilitarian near mineral springs as they were used for everyday living or ritual purposes.

Mineral springs also had medicinal functions based on the purported healing qualities of the mineral-infused waters.

Settlers had names for different types of mineral springs, based largely on the predominant substance dissolved in the water from the materials through which they pass during flow. Chalybeate springs have water laden with iron, which is indicated by the rich rusty red water color resulting from oxidation of the iron particles. Other types of mineral springs are sulfur (commonly spelled *sulphur* in historic documents and place names) and alum. In some locations, there are multiple mineral springs with different chemical compositions. For example, Grayson Springs in Grayson County, had twenty-four mineral springs of several different mineral types (DAR 2013, Henderson 1997, National Park Service 1979).

Early entrepreneurs capitalized on the purported healing properties of Kentucky's mineral springs by building spas or resorts centered on the curative waters. These resorts developed into a flourishing industry in the nineteenth century. In many regions of Kentucky, mineral spring resorts thrived during the historic period, specifically the early 1800s through the mid-1900s with a heyday around the turn of the century. In most cases, though, mineral spring resorts were either out of fashion or no longer sustainable forms of recreation from the late 1920s through the 1940s. Although the lifespans of most individual resorts were much shorter than entrepreneurs had hoped for, as an industry they collectively had a substantial, long-term impact on the cultural history of the state and its specific regions.

Culture History of Mineral Spring Resorts in the United States

"Americans have [long] sought out travel and the vacation experience to provide aesthetic and intellectual stimulation, religious enlightenment, improved physical and mental well-being, social interaction, recreational involvement and change from routine life habits" (Tolles 2003:1). Mineral spring resorts have been used for hundreds of years in the United States. Early resorts focused on what was known as the mineral spring water health movement where pleasure-seeking Americans took to the watering spots in the city and country in search of ways to live healthier lives using mineral water (Chambers 2003).

The development of the mineral spring resort industry was influenced by the new urbanized ideal put forth from larger urban centers in the North and the East along with the desire of mineral water for health benefits. These urban centers and areas just outside, such as those in New York state, Vermont, New Hampshire, and Virginia, were home to some of the first mineral spring resorts in the nation. In the northeastern region of the United States, visiting these mineral spring resorts and "taking the waters" was popular since the late 17th century, but larger and more popular mineral spring resorts lacked sizable hotels for guests until the late 1840s (Chambers 2002).

Generally, in the United States, health resorts and "spas," as they are often known, were modeled after European spas, specifically those of significant spa towns like Bath, England (Wrobel 1999). In the earliest years of development, American resort owners saw an opportunity for growth and commerce in natural mineral springs, imitating the European model of commercialization and commodification of mineral water (Chambers 2002:2). Many American proprietors and entrepreneurs named their

mineral spring resorts after those most famous in Europe. Even some counties known for their mineral spring resorts were named after European resorts, such as Bath County in Virginia, home to one of the most famous American resorts and named after Bath, England, which was a popular European spa location. (Chambers 2002:2-3).

Sadly, the mineral spring resort era is over, and resort hotel architecture at former mineral spring resorts is a disappearing resource. Most structures "were constructed of wood and hence, were fragile and of questionable longevity. Many were hastily built for quick profit and were expected to have limited life spans" (Tolles 2003:2). While they were substantial in size, these structures were ultimately impermanent architecture intended for short-term use. Currently, only some of the most popular and sturdily built structures are still around for us to examine and appreciate. In the archival record, we see the characteristic of impermanence when we learn that a large majority of mineral spring resort hotels have become victims of fire or demolition. Thankfully, the archival record preserves photographic documentation and visitors' descriptions of many resort hotels.

Resort hotels followed one of two American models (Chambers 2002, Tolles 2003), the first of which imitated the sprawling plantations of the South and the second, imitated the awe, grandeur, and urban-look that was prevalent in the North (Fig 3). South-inspired resorts typically were located on flat and broad alluvial plains of streams and rivers. These resorts often featured long rows of connected, single story cabins with covered porches around a central multistoried and colonnaded structure. The extensive verandas borrowed from the Southern plantations provided visitors with optimal opportunities for communing with nature and socializing with other guests. Some

proprietors named the rows of cabins and hotel rooms after various Southern states and cities, such as New Orleans, Georgia, and Charleston (Chambers 2002:37).

Whereas resorts based on the Southern model exuded order and simplicity, the resort structures of the Northern model were meant to inspire awe and a longing for the urban centers, along with a feeling of status and class. Resorts created in the northern model were often individual hotels that were fronted with columned pizzas with grand porches fashioned in Gothic and Greek Revival styles. (Chambers 2002:39).

Architecturally speaking, mineral spring resort proprietors "were inventing their own regional architectural style" (Chambers 2002:37) that played on the ideals of the North or the South, focusing on what was considered civilized, high-class, or appropriate for each. This was expressed by the forms of architecture used for mineral spring resort hotel. However, along with their distinct architectural idealizations, proprietors had to consider and capitalize on the scenery and natural setting of the resorts in order to appeal to the desired audience and to solicit the desired responses and reactions from visitors. In most cases, the natural world was emphasized at resorts, especially those whose primary audience was visitors from the cities. In general, resorts, and the grounds they were located on, needed to be different from the homes of the majority of the visitors and the urbanized centers. Guests wanted to see the wilds of the country and be able to experience them in a way that was safe and still allowed for proper societal and cultural interventions with others. This idea is one that made mineral spring resorts popular; they were a way for people of multiple social backgrounds and classes to mix, gather, and socialize (Chambers 2002).

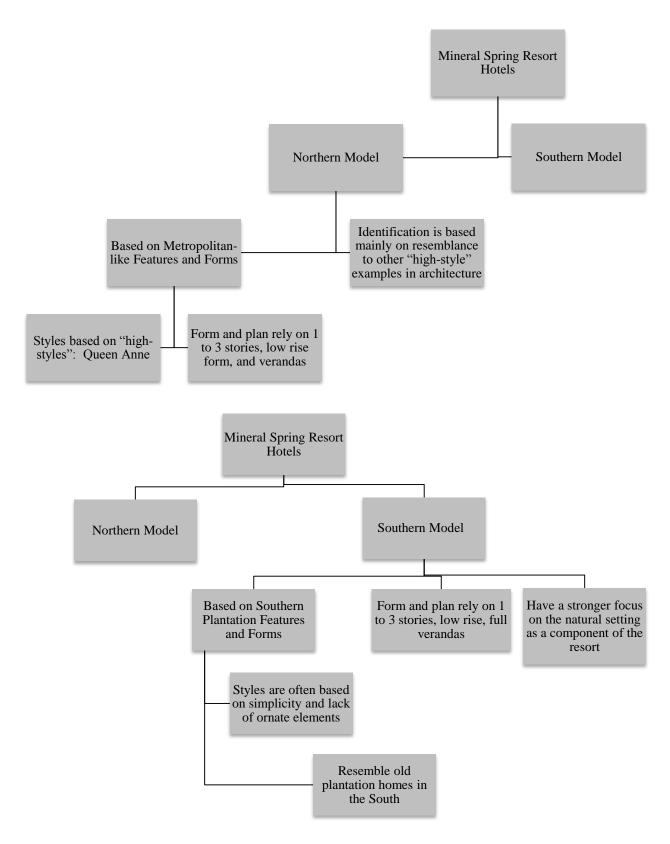


Figure 3. Types Mineral Spring Resort Hotels in South-Central Kentucky Based on Elements of the Hotel Structures, Northern Model and Southern Model Expanded.

Chambers (2002:xiii), in his work on mineral spring resorts and the crafting of an American leisure class, states that mineral spring resorts are important because these resorts served as sites of unification. Chambers concludes that mineral spring resorts were a safe place to test and reinforce the boundaries of class and social status in America and to unify people within specific social classes. Upper class visitors at mineral spring resort hotels could come together with others from the upper class without fear or trepidation. Chambers is not suggesting that these sites served to unify across classes. Visitors and proprietors examined their ideas about what creates an appropriate "elite class." In fact, Chambers identifies mineral spring resorts as being a key factor in the creation of a national elite class.

The mineral spring resort industry was highly competitive (Chambers 2011:10). Proprietors kept close tabs on four areas that were vital to the development and success of mineral spring resorts: improved transportation, money sources for goods to provide to guests, increased revenue opportunities, and labor costs (Chambers 2002:11). While improved transportation was a vital aspect to consider for the resorts, interestingly this is what is ultimately considered the great killer of mineral spring resorts. To be more specific, scholars cite the automobile and its increased ease and extent of transportation throughout the United States as being the cause of the demise of the mineral spring resort industry. The automobile is believed to have led to better and easier travel. People could travel further distances and not have to worry about the dusty or muddy roads and slower steamboat speeds. Gregory sites the automobile hypothesis as well as increased sanitation in the South and changes of fashion as two other causes for the decreased use and eventual closing of mineral spring resorts (2002:72). Cities, which were often what

mineral spring resort hotel guests were fleeing, improved sanitation greatly over the years. Sicknesses were appearing in lesser amounts and sanitary systems were put into play. Often, sicknesses that were treated at mineral spring resort hotels were those thought to be caused by poor sanitation and quality of life in cities and doctors would prescribe trips out of those "infected" areas. With improved standards in cities doctors no longer needed to prescribe leaves and the industry declined. Along with this, the mineral spring resort hotel began to fall out of fashion in the mid-1900s, which also led to fewer visits from guests. Other vacation spots became more popular and took hold with Americans looking for a place to spend the summer and relax. Who wants to travel to hotels in the forests to take in water that often tasted and smelled foul when you could travel to the beach, other urban centers, or areas quite unlike home?

Culture History of Mineral Spring Resorts in Kentucky

As mineral spring resorts developed around the nation, Kentucky was not exempt from this trend. Some of the earliest and best-known mineral spring resorts were established as early as the late eighteenth century in the Bluegrass cultural landscape; often these are the most well documented and remembered examples today. Before I began my research, I knew nothing about these types of resorts and as I began, I could only find information on large resorts that were in the Bluegrass region. Often these resorts were associated with some famous high-class family or a military genius. So far, there are no resorts from Kentucky that have been studied and are detailed in the Kentucky State Archaeological Plan. To date, historians have studied several prominent resorts in the Bluegrass, such as Graham Springs in Mercer County and Olympian

Springs in Bath County (e.g., Coleman 1955, Wrobel 1999). There have been no archaeological studies, however, and resorts in other cultural landscapes are less known. As a result, much of what is known about the mineral spring resort industry in Kentucky derives from one discipline and one region.

Accordingly, my research on the mineral spring resort industry incorporates other disciplines and focuses on western and south-central Kentucky. Working With Dr. Applegate, our archival investigations are focused on identifying mineral spring resorts that existed in a 26-county area. This project is crucial because no comprehensive survey or inventory has been conducted on mineral spring resort in this part of the state, and we will gain a better sense of variation in the industry by examining resorts outside the Bluegrass. Further, I believe the different resorts reflect the ideals of society and culture in early Kentucky history. Without examining these sites of leisure and recreation, we are losing a vital facet of our cultural past.

To date, in south-central and western areas of Kentucky, 16 counties have been identified as having at least one major mineral springs resort during the late 19th and/or early 20th centuries. In short, the counties include: Allen, Breckinridge, Caldwell, Christian, Crittenden, Edmonson, Grayson, Hardin, Hopkins, Logan, Lyon, Russell, Trigg, Union, Warren, and Webster. Geographically speaking, these counties form the southernmost boundary of the Kentucky/Tennessee border, along the banks of the Green and Ohio Rivers, and generally covering the majority of south-central Kentucky.

Now to discuss the distribution of these mineral resort springs by county requires more detail in the general location. In the area around Pembroke, in Christian County, Kentucky a once popular mineral resort spring was known as Salubria Springs. Built in

1908, this frame construction was used for about 22 years and then was destroyed in a fire in 1976 (Netz 2011) (Turner and Anderson 2006).

In Crittenden County, Kentucky, between 1887 and 1919, the Crittenden Springs

Hotel was in full operation. This frame construction was located near Marion, Kentucky

(Gilkey n.d.) (Turner and Anderson 2006) (Underdown 2008, 2010).

Probably one of the largest and most well known of the mineral spring resorts of western Kentucky was known as Dawson Springs. Located in southwest Hopkins County, this resort site consisted of more than 50 hotels and houses to accommodate its visitors. From what we know, the majority of the hotels and houses on this site were frame constructions that began at the earliest in 1882. Several wonderful examples of hotels and houses are associated with this site, including Acadia Hotel, Hamby Hotel, and the New Century Hotel (Turner and Anderson 2006).

Cerulean Springs, located in northeast Trigg County in the far southwest area of the state was another large and well-known site. This site featured both log cabins as well as a major frame construction, which had additional frame additions. The earliest dates for this site are from 1817, in relation to the log cabins and the final date being 1925 when the resort fell out of use. This spring is still a pride of community (Turner and Anderson 2006).

Warren County was also the home to several mineral spring resorts, including Massey Springs, which is the focus of this research. Along with Massey Springs, other resorts included Glen Lilly Wells near Richardsville and Stallard Springs near Hadley (Applegate 2010, Coleman 1955, Parker et al. 2001a, 2001b, Turner and Anderson 2006). The entire south-central Kentucky region is rich with mineral resources and resorts.

Counties neighboring Warren County, such as Edmonson and Grayson, were also sites of well-known mineral spring resorts such as Chalybeate Springs and Grayson Springs, respectively (Applegate and Pinkston 2013).

Survey of Three Specific Mineral Spring Resort Hotels in the Study Area

Cerulean Springs, Trigg County Kentucky

The original hotel at Cerulean Springs was somewhat plain and small, with 22 rooms located on two floors, and the second floor accessed by a set of side stairs.

Constructed in 1869, it featured four-over-four pane windows and a gabled roof without dormers or chimneys. There may have been an extending "wing" on the eastern side. In 1901, the size of the hotel increased substantially with the addition of a 50-room frame annex with a full basement (Photo 1). Featuring hundreds of feet of walkways and verandas on three tiers, the annex had four interior chimneys, a hip roof covered in wooden square shingles, at least six gabled dormers, and four-over-four pane windows. The annex was covered in weatherboard painted white with green trim. It is reminiscent of French Colonial style with its full wrap-around verandas under a hipped roof.

Gingerbread decorations unified the old and new sections of the hotel.

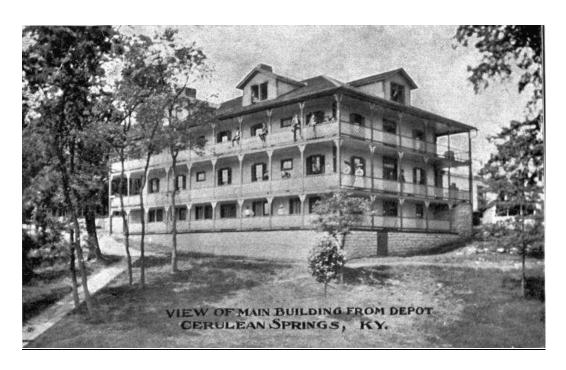


Photo 1. Cerulean Springs Hotel Annex in Trigg County, Kentucky. This postcard was mailed from the hotel to a family friend in Hopkinsville, Kentucky in 1907 (Turner and Anderson 2006:12).

Crittenden Springs, Crittenden County, Kentucky

The 1887 Crittenden Springs hotel is distinctive in form, having two extending "wings" flanking a large central wing (Photo 2). The very ornate decoration on the front façade of this 125-room, three-story hotel is quite unusual, as well. Architectural features include weatherboarding, a two-tier veranda, at least four interior chimneys, and a front-facing gable roof. Fenestrations are transoms and four-over-four sash windows. Though the uppermost pointed arch windows are characteristic of the Gothic Revival style, overall the exterior decorations using lumber framing forms exemplify Stick style or Eastern Stick style. Traditional examples of this style are associated with the upper East coast at summer resorts in Rhode Island and New Jersey (Poppeliers 1983). ⁶

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⁶ See Photo for Eastern Stick Style in Appendix B.



Photo 2. 1909 Photograph of Crittenden Springs Hotel in Crittenden County, Kentucky (Turner and Anderson 2006:103).

Dawson Springs, Hopkins County Kentucky

With at least 150 rooms, 75 bathrooms, and a full basement, the New Century

Hotel in Dawson Springs was the largest resort hotel in the study area (Photo 3).

Constructed in 1902, this frame hotel, like most others, sported a full two-tiered veranda.

It was distinctive, however, in the numerous dormers, some of which were gabled and others hipped, along with tent-roofed towers at each of the four main corners of the structure. In the center above the main entrance was a square tower with a semi-broached roof and a large flag. Windows are round and round arched one-over-one sash. The style of this hotel is more difficult to describe. Generally, I feel that this hotel would fall into the Queen Anne influenced style, notably because of its use of irregularity in plan and massing of features and its intriguing combinations of gable shapes, modeled chimneys, towers, dormers, and the wide stacked verandas. This example is also unique in this

project and the south-central Kentucky area because it does resemble other more famous examples in the United States; this specific form of hotel architecture as related to mineral spring resorts has been noted in the most famous examples in mountains of the upper Northeast, such as the Adirondacks.



Photo 3. The New Century Hotel at Dawson Springs, Kentucky. Dawson Springs was famous for its 50+ mineral spring resort hotels and its reputation as being one of the best in the state. This 1907 postcard pictures the showpiece of the resort hotels at Dawson Springs (Turner and Anderson 2006).

According to Tolles (2003), the Queen Anne influenced style was used in some of the earliest mineral spring resort hotels because the style had an air of sophistication but also mystery in its combination of features and forms (2003:8). Unlike the previous two example spring resort hotels discussed, the New Century Hotel at Dawson Springs tends to rely on the massing and architectural form to determine its style rather than applied elements. This could be an interesting point of difference with the mineral spring resort hotel type, since the Crittenden and Cerulean Springs Hotels and the Massey Springs

Hotel all seem to be of a different form and style than the New Century Hotel. Could it be possible that there are really multiple types of mineral spring resort hotels in the United States and that The New Century Hotel falls into the type/style that was popular in the northeast while the Cerulean, Crittenden, and Massey Springs Hotels fall into this other, non-defined mineral spring resort hotel type/style? I feel as though this is a fruitful idea to contemplate in future research and study.

The Crittenden Springs Hotel and the Cerulean Springs Hotel both seem have more of a "suggested" or idealized style rather than a solid overall architectural style due to the additions of elements to the façade of the structure. In the case of the Crittenden Springs Hotel specifically, I believe it would be safe to assume that the exterior decorations were probably ordered or requested rather than vernacularly adopted and adapted to use in the area. The same idea could be applied to the Cerulean Springs Hotel as well. The structure is more functional or utilitarian rather than being fully decorative. In both cases however, the structures are still vernacular in function and decoration regardless of an overall style or not. The New Century Hotel at Dawson Springs exhibits the opposite in that the structure does seem to have an overall style and it is not just a functional structure with added elements.

Accommodations at these mineral spring resorts varied according to both time and location. In most cases, the earliest accommodation forms were constructed from log and in the form of (small) cabins. This of course, does change with time. It seems as if in areas with more urbanization, a log form never existed, but rather a frame form. The frame structures often replaced the original log form, if it exists. However, there are some cases, which do not follow this general change. There are examples, such as the

Tar Springs Resort in Breckinridge County, which included a resort hotel constructed from brick and the Big Spring and Shandy Hall Tavern in Caldwell County, which included a resort hotel and tavern constructed from limestone. However, the three examples discussed were frame constructions. This is an important piece of vernacular architecture, especially for the mid 1800s to early 1900s, because this is the time when the timber industry really developed and in the most general sense, cities and towns began to grow. Not only was lumber becoming easier to find and buy but also came with certain cultural ideas and connotations. The days of the log hotels and cabins were gone, people wanted to be housed in the more "modern" forms which carried with them prestige and ideas of the upper class, power, and culture.

Ventilation, especially in an area where summers can be hot and humid is an idea that most architects and hotel owners had to think about in the days before air conditioning. For people coming in from other states to "vacation" at the mineral spring resorts of western Kentucky, the idea of comfort was probably at the front of their minds. In all example of mineral spring resort hotels that have been discussed, a large, if not completely wrap-around veranda with multiple tiers was a must-have feature. A common vernacular practice, not just in these hotels, but with houses and other structures all over the area, a porch or veranda was used as a sort of "second room" in which people would spend the majority of their days in the summer because the inside of the structure was much too hot with little or no air circulation. This idea transferred very nice to the hotels because they were spacious enough to provide ample room for large and long areas of walk and sit when the weather was just too hot.

Along the lines of the verandas for air circulation and ventilation is the number of windows and doors used in the hotels. In many cases, people who visited the mineral spring resort hotels were often suffering from some sort of disease or illness. According to vernacular belief and ideas, clean air was needed to heal those sick and to prevent others from becoming sick too. The idea of multiple windows that were fully-functional in the walls and above doors played into this idea of air movement in and out of guest rooms and major areas of the hotel. Along with air was the use of sunlight. According to some vernacular beliefs, sunlight can help heal and helps to give areas a bright and clean feel. This could have also been a reason for the sheer number of windows in the hotels, not to mention the more practical reason: more windows means more natural light which means less resources that have to be used to produce light, during the daylight times.

This description of several mineral spring resort hotels in the region is vital because it assists in setting the stage for a later chapter of this thesis which examines the Massey Spring resort hotel specifically. Comparing forms, plans, and styles helps to determine what are the pertinent and lasting features that are permeated through the mineral spring resort hotels in the area. In the end, these comparisons help to define the specific architectural form that is the mineral spring resort hotel in the Upper South region and also lead into cultural patterns that can be discovered through vernacular architectural studies of these structures.

Emergence of a Spring: Massey Springs Resort

Mineral spring resort hotels and tourism were vital to the economic development and the social and recreational pursuits of Kentuckians and outsiders. In south-central Kentucky, Massey Springs became a popular resort at the turn of the twentieth century during the heyday of the industry. Massey Springs Resort is located in south-central Kentucky. It is on the extreme northern border of Warren County, about twelve miles north of Bowling Green (Fig. 4). The Green River creates the northern border of the county and was a primary transportation route during the historic period in Kentucky; steamboats moving up and down the river carried passengers to Massey Springs as well as other recreational spots along the river, including Mammoth Cave.

Massey Springs Resort is a complex of several historic sites, including the main spring itself, additional mineral springs, rockshelters and other natural landscape features that guests visited, outdoor picnic spots, a bathing beach, at least one boat landing on the Green River, and the remains of two historic hotels that served as the primary lodging for guests visiting the springs and partaking of the water (Fig. 5).

The sought after natural feature, the mineral spring named for its namesake,
Massey was located along the base of the ridge where both hotels would have access to
is. A few meters from the spring's origin, resort owners constructed a square, rock-lined
basin (Photo 4) and a smaller circular basin that allowed some of the mineral water to
pool, providing easy access for visitors. Postcard photographs show these basins (Photo
5) and they remain visible at the site today. Along with these water catchments, there is
an artificial channel carved into the bedrock a few meters west of the spring; it likely
functioned to prevent ridge top runoff from diluting the spring's mineral waters. Another

aspect of the built environment around the spring is a large boulder with historic signatures and graffiti (Photo 6).



Photo 4. Rock-Lined Square Basin Used to Pool Water From Massey Spring, View East (Applegate 2014).



Photo 5. Historic Postcard Showing the Main Massey Spring and the Square and Circular Basins in Use (Jeffrey 2002:113).

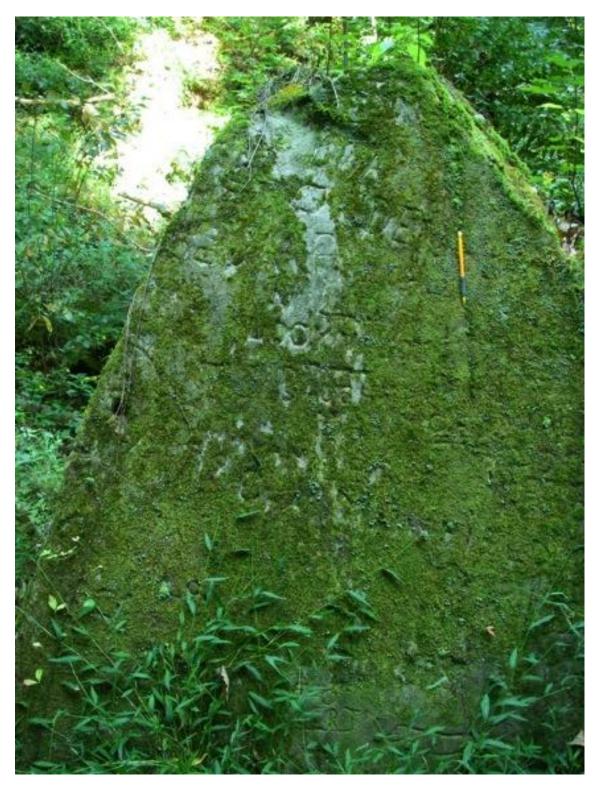


Photo 6. Carved Rock Near the Head of the Massey Spring, View West (Applegate 2010).



Figure 4. Map Showing the Location of Warren County, Kentucky and the Approximate Location of the Massey Springs Resort Hotels (Digital Topo Maps 2005).



Figure 5. Portion of the 1954 Reedyville 7.5-Minute Topographic Quadrangle Map Showing the Location of Massey Spring and the Two Hotels of the Massey Springs Resort (USGS 1954).

Environmental Setting

The Massey Springs property spans several microenvironmental zones. The first resort hotel was constructed on a high ridgetop with rock-faced bluffs overlooking the Green River and its floodplain to the north and its tributary Ivy Creek to the south. The ridge is roughly oriented east to west and is comparatively narrow north to south. Mature secondary growth forests with flora and fauna that are typical of this region cover the slopes. The first hotel was directly above a hollow in which the main mineral spring issues.

The second resort hotel was constructed along the base of this ridge at the edge of the flat river floodplain on the east side of the hollow. When guests arrived and departed their steamboats, the grand façade of the second hotel against the background of rock walls and "unaltered" woodlands was the sight that greeted them. From the second hotel, Massey Spring was easily accessed via a fairly flat path at the base of the vertical rock walls along the east side of the hollow.

The most important feature of the resort, the main mineral spring, is located at the base of the aforementioned ridge in a hollow ringed by vertical cliff lines (Photos 7 and 8). The spring issues from the base of the sandstone bedrock at the head of the hollow. The iron-laden spring water flows downslope in a narrow natural drainage channel. The location of the spring is steeped in the natural beauty of lush vegetation, towering rock faces, and large boulders eroded from the cliff lines. As one visitor wrote,

The most beautiful part of the whole place is the spring itself. It is in a small valley and you have to descend about fifty steps [from the ridgetop where the first hotel was located] to reach it. Here you are surrounded by rock walls covered with giant ferns and moss. The trees are so tall that they look as if they touch the sky. The water is composed of iron and some other minerals and is as cold as ice (Potter 1904:5).

As the centerpiece of the resort, the location of the spring was crucial for the development and use of both hotels. In this case of the first hotel, the spring was located below at the head of a hollow. Presumably, guests would either walk down to the spring to partake in the water or resort managers and/or hired help would bring the water from the spring to the hotel. In the case of the second hotel, procurement of the mineral water was ideally much easier. Behind the hotel, there is what appears to be a well-worn path leading to the spring. I would assume that during the period of operation of the second the groundskeeper or proprietors kept this path cleared and usable just as the rest of the lawn was kept.

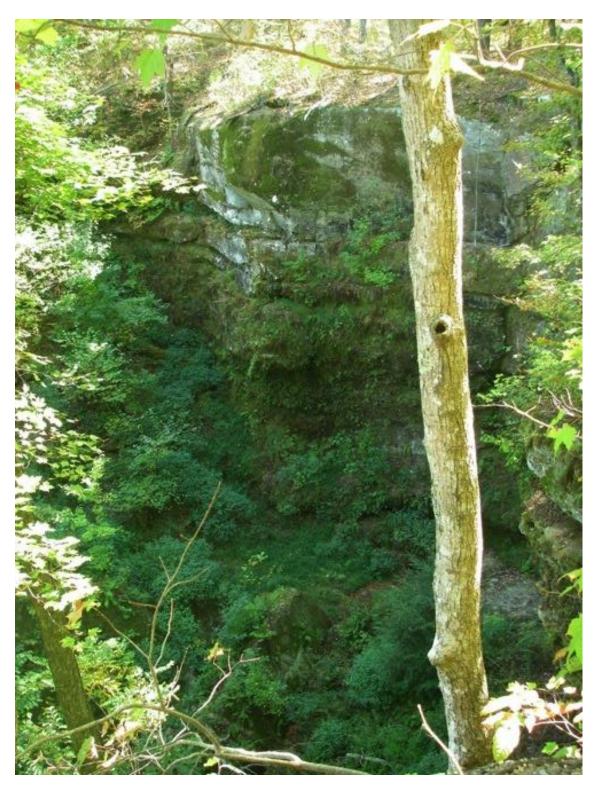


Photo 7. Hollow Where Spring Issues Ringed with Steep Cliffs. The spring is the orange stream at the bottom of the photo (Applegate 2010).



Photo 8. Cliff-Ringed Hollow Where Massey Spring Issues. The spring is the orange stream at the bottom of the photo (Applegate 2014).

Cultural Setting

The Massey Springs Resort became a popular watering spot in the late 1800s-early 1900s, during the heyday of the mineral spring resort industry in Kentucky. It underwent two major phases of development, which varied in terms of ownership, visitation, guest amenities, guest accommodations, and hotel architecture. There latter two are the foci of my research. Given that there are limited archival documents (e.g., postcards, photographs, letters, newspaper ads) on Massey Springs Resort, as well as few oral histories, the following cultural history of the resort is incomplete. Even so, it provides important context for my research and this thesis.

Capitalizing on the purported curative properties of the several mineral springs on the property, including his namesake chalybeate spring, local native James Melvin Massey created the resort at Massey Springs in the 1890s. Massey reportedly purchased the Massey Springs property from a local man, J.L. Rone, in 1893 (Raymer 1997, Sumpter 1976). Records including marriage certificates, death certificates, and census records which do help to corroborate the Massey and Rone connections to the property. Property deeds revealed that Rone had owned the property in the past and that Massey owned the property in the past as well, but an actual deed linking the two and the sale of the property was never located. I have also not found primary documents indicating if and when Massey purchased the property from Rone, nor when Massey opened the resort. The resort was open by at least July 1898, based on a dated photograph of guests at the resort (Jeffrey 2006).

Transportation to the resort was either by boat on Green River or by horse on unimproved roads. Mr. Massey was known for driving a hack (a horse-drawn carriage)

to Bowling Green to pick up his guests (Raymer 1997). Upon arriving at the property, the only way to get to the hotel was to walk, ride a horse, or take a carriage on dirt roads along the hillsides.

James Melvin Massey operated the first hotel, though there are no records indicating if he constructed the hotel or converted an existing structure. There are no known photographs and only one brief verbal description of the first hotel. A former guest wrote: "The hotel is surrounded by tall forest trees. Two large halls crossing each other run entirely through the building, and the rooms are in the corners thus formed. This makes it very cool and pleasant, as the halls are open at each end" (Potter 1904:4). If accurate, this description suggests the first hotel had four rooms.

Unless the resort had additional housing such as cabins, which are documented for other resorts in the region, the number of guests that Mr. Massey could have accommodated was limited. With a relatively small number of guests, it is possible that family members were sufficient to staff the resort. In 1900, though, widower John S. Childress was a boarder in the Massey household and worked as a "house carpenter" possibly for the resort. By 1900 the hotel reportedly employed people as cooks and waiters (Raymer 1997).

On an unknown date in the early 1900s, circa 1904-1905, fire destroyed the first hotel (Sumpter 1967). This event ended the first phase in the resort's history. According to the current farm manager, some of the materials that were left after the fire were used to construct a second hotel (Applegate 2010).

The resort expanded in many ways during its second phase, which began when George F. Cole of Bowling Green and his business associate from Memphis, J.S.

Williams obtained the property from Mr. Massey by 1904-1905 or 1906 (Raymer 1997). In 1905 or 1906, they constructed the second hotel, a much larger three-story, 40- or 42-room frame structure on the floodplain adjacent to the spring hollow. The second hotel contained thirty-four bedrooms and bachelor's quarters of six rooms. It featured a large dining room measuring about 56 x 20 feet. The second floor reportedly bathrooms and toilets with hot and cold water. There was a large porch on two levels, a duck pin alley, a kitchen addition; outbuildings included a large dance pavilion and a servants building (Coleman 1955, Stout 1992, Sumpter 1976). The hotel even had a telephone (Porter 1909-1910).

In all, the second Massey Springs hotel was a full-service hotel with added additions and features for entertainment. It was constructed so that guests had ample accommodations and activities other than the mineral water resources. During this period, the hotel had seemed to reach its heyday. During at least part of its existence, the second hotel had manicured lawns and spaced designated for gaming and picnicking (Photo 9). According to sources, the hotel was known for its events on the lawn and the veranda. Entertainment was provided by an African-American man named Henry Dial, who would come from Bowling Green with his string band; in the summer the band played at meals and in the evenings for the numerous dances and get-togethers (Raymer 1997).



Photo 9. Boat Landing at Massey Spring Resort Hotel. Photo shows the manicured lawns and pathways of the hotel lawn. View is from the upper porch of the hotel (Photo courtesy of the WKU Kentucky Museum).

The Green River continued to play an important role during the second phase of the resort. Visitors enjoyed a bathing beach and fishing. The resort also featured row boats and a gas-powered launch that could accommodate up to 75 people. A boat landing was built on the south bank of Green River just north of the second hotel (Jeffrey 2006). Although most guests continued to arrive at the resort by boat, especially steam boat and river packet, visitors also traveled by automobile from nearby Bowling Green (Cole and Williams 1912b), sometimes using a transport service provided by McGinnis Auto (Cole and Williams 1912a).

Summer 1915 marked the last season for Massey Springs Resort and the hotel closed its doors to guests. The second hotel and surrounding property were sold in the 1920s to Dr. Fred E. Cartwright of Bowling Green who used part of the hotel as a residence (Raymer 1997). After Cartwright's death, his widow sold to property to J.E.

Polly. The hotel was razed in 1942 or destroyed by fire in 1944 (Raymer 1997, Sumpter 1976). Currently, the only above-ground remnant of the second hotel is part of a concrete foundation or retaining wall (Photo 10). No archaeological investigations have been conducted in the second hotel area, however, I am confident that if allowed, future investigators and researchers would find structural remains and ample evidence of recreational activities.



Photo 10. Retaining Wall or Concrete Foundation Remains of the Second Hotel at Massey Springs (Applegate 2011).

While both hotels are equally fascinating, the second hotel has much more documentary evidence of its use than the first. Due to this difference in available data, the approaches for investigating each hotel was must differ. With very little documentary evidence of the first hotel is available, archaeology must play a key role in research. In

comparison, research on the second hotel can rely more on records and documents; archaeology could be used to test differing accounts in the archival records and to learn about other aspects of the hotel.

CHAPTER 3: METHODOLOGY

This thesis uses multiple disciplines to investigate the past lifeways and culture of a group of people. This chapter describes the methodologies I used in my research, as well as their importance to this particular project and the much larger case of holistic studies. To begin this chapter I describe the spatial and temporal frameworks that bounded the research project. Next, I explain the multidisciplinary approach applied to my case study. I then detail the archaeological and vernacular architecture methods employed in the research, as well as other methodological approaches.

Spatial and Temporal Frameworks

Archaeological and historical research in Kentucky is organized spatially on the basis of cultural factors that are known as cultural landscapes. Cultural landscapes in Kentucky represent a combination of a region's cultural and natural developments, such as mineral and soil resources, as well as its economic and historic characteristics (Pollack 2008). The five cultural landscapes are the Purchase, the Pennyrile, the Ohio Valley Urban Centers, the Bluegrass, and the Appalachian Mountains (Fig. 6). Except for the Purchase, each cultural landscape is divided into specific sections. Sections of the Pennyrile are the Western Coalfield, the Pennyrile Plain, and the Eastern Pennyrile (Pollack 2008).

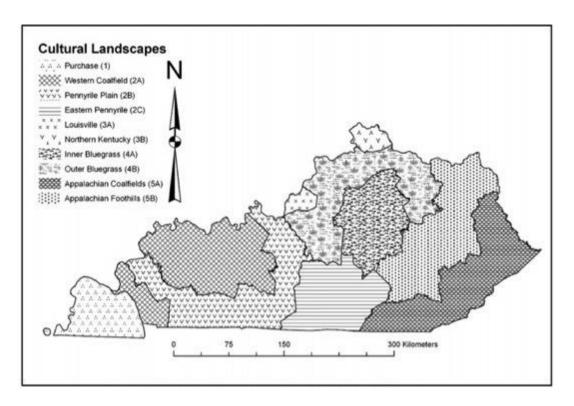


Figure 6. Map Showing the Location of the Cultural Landscapes of Kentucky as Defined by Archaeologists (Pollack 2008:10).

Archaeologists divide Kentucky's past into specific periods based on the cultural practices and occurrences that were prevalent during a specific range of years. Since my background is in archaeology and there seems to be a lack of well-defined time periods and subperiods for cultural history in Kentucky within folklore and vernacular architecture, I use the archaeological divisions of time. Broadly, Kentucky's past is divided into two broad periods, the prehistoric and the historic. The prehistoric marks the earliest evidence of human occupation in Kentucky and continues until contact with non-indigenous settlers in the historic period. The historic period is marked by the "widespread depopulation but not disappearance of Native American groups, and the establishment of European-American and African-American influences in Kentucky after about A.D. 1700" (Applegate 2010:13). Archaeologists divide the historic period into six subperiods: Pre-Settlement Exploration (pre-1775), Early Settlement or Frontier (1775 to

1820/1830), Antebellum (1820/1830 to 1861), Civil War (1861 to 1865), Postbellum (1865 to 1915), and Industrial and Commercial Consolidation (1915 to 1945) (KAS 2009, McBride and McBride 2008).

Each subperiod is notable because it is marked by specific and crucial changes in the economic and cultural lifeways of Kentuckians, though the nature and timing of those changes vary across Kentucky's cultural landscapes. In the Pennyrile cultural landscape, the Pre-Settlement Exploration subperiod is not well represented in the Pennyrile prior to 1775, at which time Kentucky was still part of Virginia and few settlers had reached the area (Applegate 2010). However, evidence of change does begin in the Pennyrile during the Early Settlement or Frontier subperiod. The first permanent settlements and the most basic forms of infrastructure were established. During this subperiod, settlers stuck to trails and ferries at major river crossings. The population grew and regional industries, such as niter mining, developed (McBride and McBride 2008).

The Antebellum subperiod represented a time of many changes and growth in the cultural and economy of the Pennyrile. During this time, river trade and travel became a primary source of economic and social exchanges, large-scale farming of cash crops such as tobacco became widespread, and resource extraction (especially large-scale coal mining) in the Western Coalfields section became an important source of income.

Railroad systems developed in the late Antebellum, resulting in a reorientation of travel and commerce routes (McBride and McBride 2008).

During the Civil War subperiod, both Union and Confederate troops constructed forts across the state; including five forts in Bowling Green (Warren County) and others

throughout the Pennyrile. Other types of Civil War sites in the Pennyrile are encampments and battlefields (McBride and McBride 2008).

After the war, the Postbellum subperiod saw the reemergence and revitalization of industries that had taken root in the Antebellum subperiod, specifically the timber and coal industries in the Pennyrile. Social changes persisted as former slaves began to find new places in society and cities grew. Continuing this growth, the Industrial and Commercial Consolidation in the Pennyrile is marked by the mechanization of agriculture, the slow disappearance of small farms, continued urbanization, and an increase in access to consumer goods (McBride and McBride 2008).

A Multidisciplinary Approach

The study of a cultural resource is possible within the frame of one discipline.

This has been done many times over the years and is usually what we find or read. An archaeologist could study a historic homestead looking at artifacts recovered from site excavation and remains of structures, or a vernacular architecture scholar with a folkloristic approach could study standing structures at the same homestead looking specifically at architectural features, form, and materials.

Often the studies we read on such sites represent the findings of one of these disciplinary lenses. Arguably, this could lead to a skewed view of this example site; a reader would only be seeing the conclusions and perspectives of one discipline. What happens if conclusions from different disciplines are not similar? Which is an authoritative view of the past and which do we believe as "real?" These questions often do not come up because most of the time we are not given two ways of viewing a site, for

example. Thinking logically, if one were to use disciplines like archaeology and folklore, they do not have to be separate; they can form a much stronger conclusion if they are bonded with each other in both the study and analysis phases.

I must come back to my previous idea and discuss it a little more since the word "divide" is heavy in both connotation and denotation. Being a student, I have been on both sides of the metaphorical fence discussed here; I have sided with archaeologists and have sided with folklorists. The combination and acceptance of the two is a place that I believe many scholars never get to because of an imaginary belief that one is more correct or more useful than the other. I want to make clear here, however, that my training in both fields has been equal and complementary. Dr. Applegate uses techniques outside of the conventional analysis of tangible artifacts, such as oral history interviews and primary and secondary historic source study; Dr. Williams is aware of the critical use of archaeology in a setting where it would create new data and add to cultural ideas and findings. My training has been a complementary one that is a full-spectrum, holistic approach.

However, I have been lucky to complete my education in this way, as many students and scholars do not have the opportunity that I have had. In this case, it is vital that we realize that choosing one discipline or approach over another is not just picking one over the other, but a sort of ignorance, in the nicest way to possibly think about it. I have personally heard students and other people dismiss the use of folklore in an archaeological setting not because they think it is wrong, but because they do not understand what it can add to conclusions and hypotheses. Those who opening criticize the use of folklore in archaeology negatively do not see the human experience related

aspect that folklore can add to tangible remains. I have seen the complete opposite occur as well. Students of folklore have dismissed the use of archaeology because it is something that impinges upon the very human-driven nature of folklore and makes it "too scientific." At the 2013 meeting of the American Folklore Society in Providence, Rhode Island, Elliott Oring made a comment about archaeology and folklore that stuck with me. In comments made on the paper and presentation of a colleague of mine, Oring stated that archaeology is an extremely useful tool, but no one uses it because archaeologists do not use folklore. He then went on to state that to make the two work, we should start looking for archaeological reports that incorporate folklore. Although this statement was somewhat flawed since there was no discussion on folklorists using archaeology, his statement made a point with me. I have in extremely rare cases seen an archaeological report that made use of folklore in its findings. Thinking back to working as an archaeological field technician with a cultural resource management firm, there was never once any mention of folklore-related aspects, unless it was related to a historic structure, which even then was limited. These things would get a person laughed at and ostracized. I immediately began to think about whether it would be difficult or not to add a chapter into archaeological reports that discussed folklore and folklore-based research and findings that would be separate from the cultural history sections that are often included. If the reason for producing archaeological reports is to disseminate findings and the raison d'etre for archaeology is to study our past, why is folklore not an included subject in these reports? Of course, the easy answer to this is because archaeologists are not trained in folklore as I have the luck of being. This, of course, is only a thought in my mind and I realize that obtaining and answer for this question is nearly impossible on

a larger scale. In general, though, I have heard very few examples of students and scholars wanting to use these two methods of research together, but when I do, I take note and listen.

In turn, my thesis centers on the bridge between disciplines that could exist if researchers used multiple disciplines in their approach and analysis. A complete picture of the material culture of lifeways of a people, group, or community is not provided with a singular disciplinary approach; the past is looked at as if it could conform to a singlesided view when in fact the past is not singular. This would leave studies to be a sort of "integrated" multi or cross-disciplinary study that draw upon multiple (at least two) disciplines. In the case of this thesis, a bridge is crafted between archaeology and folkloristic vernacular architecture studies. To facilitate this ambition, I have conducted original research on a historic mineral spring resort hotel site in south-central Kentucky called Massey Springs Resort Hotel. This cultural resource is a fine example for this model because it can easily be studied from multiple perspectives. Currently there are no standing resort structures; this being the case, Massey Springs is worthwhile example of the explicit need of using a multidisciplinary and integrated approach to investigate past life ways. In the upcoming chapters, I will discuss the physical site and its characteristics in more detail.

Archaeology Methods

In order to use Massey Springs Resort and complete my stated mission, my methodologies are numerous and sample from the disciplines. Starting with archaeology, there were several field and lab methodologies and techniques that I used to recover,

analyze, and interpret evidence from the first hotel site. The primary field methods were surface survey, probing, shovel testing, screening, and metal detecting. Surface survey is just what it sounds like, a systematic survey of the surface where a site is located, looking for evidence of past human activity, such as cultural vegetation and cultural items. Probing involves the use of a long metal rod as a device to pierce the earth in search of underground artifacts. In the case of this project, we use probing to look for buried structural remains. Archaeologists conduct shovel tests to delineate a site and determine where the central area of a site is. Using a shovel, we dug small test pits until we reached the sterile subsoil in search of artifacts. If a test pit comes back positive, you continue conducting test pits until you can create a boundary of the site with negative test pits. Screening is done when you have soil from either test pits or excavation. Using a handscreen or a larger model with legs, we move any soil removed from the site through the screen allowing the soil to fall away and artifacts remain. Metal detecting was a method we employed to look for structural walls. Using this device, we use signatures from artifacts in the soil to delineate the walls of the historic structure. With the help of Dr. Darlene Applegate, I used these methods to locate and recover artifacts associated with the first hotel and to find and expose structural remains of the first hotel. For example, pierstones for the hotel foundation were located, and with this information, I created rough estimates of the actual dimensions of the first hotel. Excavations around the stones provided further proof that the stones that we located on and below surface were indeed pierstones. By looking at artifacts recovered from around the pierstones and comparing them to each other and to several stones that we knew as pierstones for sure, we deducted that the others that were identified were also pierstones.

Artifact analysis focused on diagnostic artifacts, which are artifacts that can be used to gain specific data about a site, specifically dates and time periods. For this reason, diagnostic artifacts are some of the most important artifacts excavated and collected from archaeological sites. Temporally diagnostic artifacts from the Massey Springs first hotel site are window glass, nails, ceramics, and container glass. These four dating methods are used together in order to cross-date the site, meaning to corroborate each date or time range from the individual methods.

In general, glass artifacts as part of an artifact assemblage from a site can often yield some of the most useful relative dating. This is because glass was a widely utilized material, used to hold numerous goods and substances over the years. I would compare the use of glass as a container to our current day use and near obsession with plastic and using plastic as a container material for countless goods and products. Glass is an old world invention of fused or vitrified silicon dioxide (or quartz sand), meaning that it was brought over to North America from Europe, where the original idea was borrowed from The Old World. The Ancient Egyptians were and still are known for their creation and use of faience figures, which are made of vitrified sand and colorants (Duckworth 2012, Wallace-Dunlop 1883). "Glass was first made in America is 1608, when the London Company established a business at Jamestown" (Deiss 1981:7). The industry has continued to grow and is still a widely used material today. Currently, archaeologists divide glass primarily by its morphology; flat (window) glass and curved (container) glass. For this thesis and research project, both types of glass were recovered from site excavations and are used in the artifact analysis.

While there are several specific characteristics of glass artifacts that make it a vital element for analysis and classification of artifacts, the color of glass is the most useful for this project. Glass color is known as a diagnostic physical quality; diagnostic generally means that an element is indicative of a specific group of people or time period (West Virginia Division of Culture and History 2014). Usually archaeologists will also look at other physical elements, such as container form and shape to determine dates for use or creation, however this option is not as viable as glass coloration for this project because I have not recovered any intact or nearly complete glass containers from the excavations. At this time, the artifact assemblage is dense with glass shards and some partial bottle elements such as broken necks and bases, but nothing whole or mostly intact has been recovered.

Glass artifact and shard colors can give rough time frames of reference for specific sites; this is certainly true if artifacts collected at a site are of pertinent colors that have specific ranges of time for use or creation. Although color is usually an easy to see physical attribute of glass, using this as the sole method for dating a site is not a viable option as using color to date glass shards and artifacts is limited in its span and depth for several reasons. As explained by Jones and Sullivan,

Classification by colour is simple to do, the end result is of little value for the following reasons: colour does not have a direct relation with glass type (the common green, amber, and brown glass colours can occur in soda, potash, and lime glasses; many lead glasses are coloured); colour is not related to the technology of glass object production (i.e., it has nothing to do with whether the glass is free blown, mould blown, pressed, or machine made); colour is only weakly related to the function of the object (almost all colours can be found in all types of objects, an obvious exception being "black" glass which does not occur in tableware). (Jones, Sullivan, et al. 1989:12)

The reasons given by Jones and Sullivan are certainly true for glass in all regions, however the limited use in the south-central Kentucky region is also applicable because colors can overlap and movement and use of specific colors does not follow a strict path or timeline for all areas. The south-central Kentucky area generally, by the time that most major metropolitan areas were using specific colors of glass in their materials goods, that same color was not being used in the south-central Kentucky. By the time that Kentucky received the technology from trade and began to use it, the color may have already been out of style in the metropolitan areas. Stylistic trends such as glass color went into and out of style much quicker in the more urbanized areas than those more rural such as south-central Kentucky.

Diffusion of materials can be slow, but this changes substantially when you add in the factor of tourism such as what was seen at Massey Springs. I assume that material use and creation was not as slow to get to Massey Springs and other mineral spring resorts in the area due to their status as vacationing and summer spots and their movement of people in and out from all areas of Kentucky as well as other metropolitan cities and areas around the eastern United States. This constant movement of people and ideas did not hinder, but helped to possibly increase the creation and use of more popular material forms and colors from other areas of the state and nation.

Although glass color is not always an absolute dating technique (unless you are getting exact dates) and is specific to area, it still can give ranges of dates for use and occupation. Since there are little date-related resources for the first hotel at Massey Springs, I chose to use dates relating to the color of glass artifacts and shards as a beneficial technique for acquiring some rough date ranges for the site. Having a date

range from these artifacts can help to corroborate other date and time ranges from other relative dating techniques employed for this site and research project. Two specific glass colors that do have a diagnostic quality and that we recovered from the first Massey Springs resort hotel site were teal Mason jar glass and amethyst glass shards.

There are several methods and formulas for calculating a year based on window glass shards, so generally archaeologists use those that are specific to the area they are working or those that yield better results depending upon the sample size and the context of materials collected. Window glass is a good indicator of age because, generally, window glass tended to thicken as time passed (Day 2001); the thinner the window glass, the older the date. Due to this, the somewhat steady change in the thickness can be observed and allows archaeologists to calculate a date estimate for flat window glass shards. A well-known archaeologist who studied window glass thickness in relation to time ranges and dates is Randall Moir. In his 1987 article, Moir created and described a formula used to estimate an approximate date of construction of a structure. To use this method of dating, the thicknesses of window glass shards in an assemblage are measured (in millimeters) and the average thickness is calculated; the average is put into Moir's regression formula. Of course, this technique can have its caveats; windows can be replaced after construction (Day 2001). This, however, is not a flaw since it gives extra useful information about structure maintenance and there is a way to discern initial construction dates from general maintenance by looking at modes in the thicknesses.

Currently, there are six major formulas and techniques accepted and used by archaeologist to date window glass: the Walker mode method, the Chance & Chance mode method, the Roenke mode method, the Ball mean method, the Moir mean method,

and the Schoen mean method (Weiland 2009:30). Through his comparison of these six methods, Weiland came to the conclusion that of the six methods, three were most effective at calculating a date, the Roenke, Schoen, and Moir methods. Of the three, he noted that the Moir and Schoen methods were better suited for assemblages of small, specific structures where the context was good (2009:39-40). Using this study, I narrowed down my choices for which methods I would use depending upon the region of application and the date range of each. Using Weiland's table (2009:30), I concluded that the only methods that I could use were the Walker and Moir methods. The Ball method could be a good fit for the assemblage as it does cover the correct region of application, but the date range is much different for the assemblage when put into juxtaposition for other dates obtained; the Ball method yields a date that is about 50 years later than the other methods used. While the date is significantly different, it still must be examined as possible method for dating and no assumptions that it entirely correct or incorrect should be made on my part.

Along with window glass thickness dating, nail chronology also is a vital way to estimate approximate dates of structure construction because nail morphology varies by time. Over time, just as window glass has changed at a noticeable rate, nails have also changed in a noticeable manner; typically, three types of nails are found in North America (Sutton and Arkush 2009) with each type being characteristic of a specific range of years. The earliest nails used were much different in form and material than those used in later years. Using time-frame theories constructed by past scholars on the basis

⁷ See appendix D for calculation of formula.

of nail forms and technology, an approximation of a year(s) of construction can be determined (Wells 1998).

There are three morphological types of nails in the historic archaeological record: hand-wrought, machine-cut, and drawn-wire (Nelson 1964, Sutton and Arkush 2009). ⁸ Each type of nail prevailed during a certain range of years, though, as with container glass colors, nail chronology varies a bit regionally; there are cases where nails are introduced and phased out of a location at different time spans. Like the movement of glass, the movement of nails as a construction tool also depended upon the amount of travel an area took part in or received. In the case of south-central Kentucky, I would assume that the first nails and new forms of nails after entered the area at a slower pace than other areas that were more metropolitan.

Hand-wrought nails developed in medieval Europe. Generally, all nails are made from one of two types of iron: wrought iron or steel (Wells 1998). Eventually with travel, hand-wrought nails were brought to the United States and adopted for use. Just after the American Revolution, machine-cut nail manufacturers began to appear in the northeastern states. People were now able to mass-produce nails for use, allowing for a higher supply and demand and a cheaper price. Sometime in the 1850s, wire nails were introduced to the United States from examples produced earlier in England and France; wire nails became more popular in the United States in the 1880s-1890s. Cut nails were eventually phased out of use and wire nails became the primary building hardware for structures (Carter and Cromley 2005:40-41, Nelson 1964).

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⁸ See appendix B for graphic on the types of nails.

⁹ For a more in depth discussion of the manufacture of nails, please refer to Wells (1998), pages 81-87. Here, Wells discusses in more detail the manufacture of each of the three

Container glass shards also are chronologically diagnostic. In this case, diagnostic attributes of glass containers like bottles or jars include glass color, manufacturing method, and brand. A common example that appears at many historic sites is Mason canning jars. These are specifically important diagnostic artifact because teal Mason canning jars were only manufactured for a short period, between 1890 and 1930. Finding a teal Mason jar at a site could place its time of occupation between these years. There are other crucial glass colors that can yield relative dates, such as amethyst and olive.

This model is used to date a historic ceramic assemblage. In order to calculate using this model, one must follow three steps beginning with separating and sorting the ceramic artifacts in the assemblage according to ware categories. After the ceramics are sorted, you must then calculate a multiplied date, which takes the number of each ware type and multiplies this by the accepted dates for historic ceramics. These dates have already been constructed and published by historic archaeologists and have been used for years. To finish, you must then calculate the mean ceramic date for the entire assemblage by adding up the sum of the multiplied dates for each sample and dividing it by the total number of ceramic artifacts used. In the end, you should be have calculated a date that is accurate \pm 10 years.

Archaeology is not just important when it comes to determining dates and times.

Another important use of archaeology lies in determining use and functions of artifacts and sites. To accomplish this, archaeologists analyze functionally diagnostic artifacts from both the surface and subsurface contexts and apply specific interpretive models

nail forms and with relation to the type of iron they are made from. What is presented here is a brief outline of the history of nail manufacture.

about site function. These are often known as activity models and compare the excavated artifacts with lists of projected artifacts that one could expect to find at specific sites depending upon use and function. Historical archaeologists use models such as those developed by South (1997) and McBride-McBride (2008). These two models separate artifacts and features into use and activity categories that allow archaeologists to identify the types of activities that occurred at a site.

The South model (1977) divides artifacts into nine activity groups, some of which are subdivided into subgroups. The nine main groups are kitchen, furniture, architectural group, arms, bone, clothing, personal, tobacco pipe, and activities. It may be noted that not all artifacts fall into one of these nine groups neatly, but rather additions could be made to this model including groups that specifically fit for other activities. Other suggestible groups could include religious, agricultural, transportation, recreation, or funerary.

Just as with the South model, the McBride and McBride (2008) model divides artifacts and features from the site into groups that vary by function. In this model, McBride and McBride have created 14 groups: dwelling and providing shelter; food preparation, storage and/or consumption; farming and stockbreeding; clothing use or manufacture; armed conflict; hunting and trapping; medical treatment and medical care; personal status maintenance and social activity; entertainment; lumbering; milling; mining and related resource procurement; manufacturing; and moonshining. Unlike the South model, the McBride and McBride model does not subdivide each group, but rather it gives lists of predicted remains and artifacts.

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¹⁰ See appendix D for full listing of the South model artifact groups, as complied by Alan Longmire (2001).

An easy example would be a kitchen site/area. Here, an archaeologist would expect to find artifacts such as cooking utensils, animal bones, and dishes. If a high concentration of artifacts such as these are found and little of others, it can be concluded (in most cases) that the central activity of this site are those that are aligned with cooking and other kitchen activities.¹¹

Folk Studies - Vernacular Architecture Methods

To compliment the archaeological methods, techniques found within vernacular architecture studies, specifically those of a folkloristic leaning, are integral to understanding historic sites with structural remains. In this thesis, I use three lines of evidence with vernacular architecture in tandem with the aforementioned archaeological methods. The first way of using vernacular architecture is to examine architectural features of structures. This is something that is seemingly easy to do since architectural features are outward expressions (generally) and are easily seen and compared with other static examples of types. For this research, I used photographs of the second hotel to look for and identify specific vernacular architectural features. Later, I compare those to specific types and forms recognized. Here, it is important to distinguish between features and style, since the two could be generally confused in this work. Form is another aspect of architecture that is used within the study of vernacular architecture; scholars of this field make an extremely clear distinction between form and style. Here, features are specific units of pieces of architecture added to a main structure. This could be a window, a cornice, railings, or columns. A style is the overall feel of a structure taking

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¹¹ See Appendix D for the McBride and McBride and the South Models which give lists of expected artifactual remains to be found at a site depending upon use of areas.

into consideration all of those architectural features, some, if not most of which would be delineated in the previous step. Styles can include architectural elements and features that are physical added to a structure such as window encasements in specific shapes or even the general symmetry and massing of a structure. Style can refer to a very small part of a structure such as a column form or the overall structure as a complete amalgamation of these smaller elements, or architectural style motifs.

Like features, stylistic elements are often easy to identify but they are not as cutand-dry as features; in many cases, the style of a structure will not have every prescribed features diagnostic of a specific style. In other cases, no overall style can be applied to a structure but rather bits and pieces of several styles. This can cause a problem if one were looking for styles only; however this for me is where a lot of the delineation of a structure being 'vernacular' comes into play. Style is a debated concept within architectural studies. Because it is a commonly used word, it can be applied in many different ways; this is a problem for vernacular architectural studies in that style is loosely defined, changes, and can sometimes not denote the vernacular, folk, or common. Often, the dictionary definition is given: "a definite type of architecture, distinguished by special characteristics of structure and ornament" (Poppeliers, Chambers, and Schwartz 1983:10). Others may classify style as fashion for structures, dismissing the idea of folk architecture (McAlester and McAlester 1984:5). Nonetheless, style refers to a name or classification that takes into account the outside features that are usually added onto the actual structure. In general, a style is a collection of features that create an overall visual feel or look of a structure. This is not limited to only decorative features added to the exteriors of a structure, but also general form, shape, plan, and overall massing and

proportion (Gowans 1992:xii). In the United States, we have several common architectural styles such as Gothic, Georgian, and Federal styles, all of which have specific elements that make them distinctive from one another.

The structures that we see everyday often shape a large portion of what we perceive of the world. Architecture, as everyday and ubiquitous as it may seem, can have a strong influence on us; it can speak so many different languages and say so much about its builders and its inhabitants. This remains the case when we speak about residential structures and commercial structures and is strongly the case when examining historic mineral spring resort hotels. Architecture has several distinct parts, just as a structure has distinct parts that come together to create a whole. In the case of architecture in general, often two variables are recognized: form and style. Along with these two factors, the plan is sometimes examined however, it can get confusing when discussing form and plan, which can seem like the same characteristic. To clear up and avoid this confusion here, I use Hubka's (2013) distinction between form and plan, which proposes that form is external and *plan* is internal. In my study of the vernacular architecture of Massey Springs, I examine both of these factors as much as possible. Generally, style does not provide as much difficulty as the other two variables, except that it is difficult to find structures constructed vernacularly that fit perfectly into one style.

Form and plan can often be confused for one another in an architectural setting.

This is often the case being that form and plan seem to be less obvious at times,
compared to architectural style, making it easy to confuse the two. A distinction between
the two is that form is the external idea that we see in architecture. This could include the
naming of structures as one-room-deep, dog-trot, shotgun, or I-house. The form is more

specific to the shape of the structure. Plan refers more directly to the floor plan or internal layout of the structure. For example, naming classifications such as center-hall plan, shotgun plan, or the bungalow plan are common examples we can encounter today (Hubka 2013). While these names may overlap, such as the shotgun nomenclature, shotgun as a form refers to the general shape and folkloristic roots of the structure while shotgun as a plan refers to the general internal layout and floor plan that is typical of shotgun houses. Because form and plan rely on a physical structure, it can be difficult to discuss these features when a structure is no longer extant. This is the case with Massey Springs where no physical structures remain, only photographs; this should not discourage researchers, however, since photos can reveal a great deal.

Other Methods

Of course, archaeology and vernacular architecture methods were not the only approaches I took in conducting my research. It is pertinent to note that informal interviews and oral histories filled some gaps in the history of the site, not to mention intense sessions in the archives and the deed rooms of the local courthouse. Hours had to be spent locating photos of other mineral spring resort hotels in the area, as well as digging up any histories or snippets of information about those hotels. Archival work does not neatly fit into one discipline or the other, but rather in this case both archaeology and vernacular architecture studies can use this line of evidence. It is fundamental to give credit to the other conduits used to gather information to have made what this thesis sets out to do possible.

Although Kentucky is lacking syntheses of mineral spring resort sites, a small amount of documentation of some of these sites does exist, but as mentioned before, it takes a lot of work to find that documentation. Photos, advertisements, and first-person historical documents do detail the existence of some mineral spring resorts in south-central Kentucky; in fact these types of sources are for the most part, all that I have available as documentation. These historical documents and narratives that inhabitants and visitors composed, along with articles and advertisements in newspapers in the areas where mineral spring resort hotels existed have provided pertinent details about social use, especially in relation to important events and pastimes that were vital at mineral spring resorts and hotels.

Within the collection of vernacular architecture research there are other examples of how oral history has been used in the past to understand architecture. In Charles Martin's *Hollybush* (1984) it becomes clear that oral history alone does not work to understand and interpret architecture; "they [oral history and architectural analysis] complement each other once integrated" (1984:5). Using oral history, it can be found that material culture, especially houses, are used much differently in everyday life than what is commonly interpreted. Williams makes this point clear in her text *Homeplace* (2004) and her article expanding on this earlier text focusing on the Appalachian Boxed House and the vitality of oral history as a primary or secondary source for understanding structure use and function (Williams 1990). These two works also focused on impermanence of structures, which was also the subject of the Carson et. al. work discussed earlier. McDaniel, in his text *Hearth and Home* (1981) demonstrates this for African American folklife and culture. In her article on farmhouses in the Catskills,

Scheer (2000) makes clear that use is not only defined by architectural form; oral history is a critical investigation technique when it comes to understanding the past and the actual use of a structure. The same point is driven home by Adams in her work on the Eichler Home (1995) and the difference between projected and actual use. Hardwick demonstrates the importance of using oral history to understand architectural forms with his discussion of the changing use of rooms based on social need not architectural forms where meaning is not inherent in form but by users in context (1997:30). Hardwick sums this idea of using oral history with architectural studies clearly here:

...by paying attention to the details of personal narratives, architectural historians can avoid making sweeping characterizations about a group's architecture. Likewise, people's words have the potential to redirect a historian's interest and interpretations to new questions and new information...when used in conjunction with artifacts, oral history not only explains questions about architecture but also extends the understandings of architecture by underscoring the intangible actions that provide architecture with its day-to-day significance (1997:30).

After considering the style and features of the hotels, it is essential to this study and the nature of the disciplines represented that some sort of synthesis be completed with the information and data collected. Here, I use what I gathered to compare and contrast the hotel form(s) at Massey Springs with the hotels at other resorts. Along with the tangible aspects for comparison and contrast are the intangible aspects of mineral spring resort hotels, namely the social functions of these structures. It is well documented in historical sources that lavish dances and parties were held in the ballrooms and parlors of these structures and that, along with being health spas, the resorts also played large role in the social life of those who visited. Using archival information along with testimonials of the lavish social atmosphere at other resorts in the

area, more information on the past times and social lives of these resort hotels can also be determined, adding to the holistic picture painted of the past.

Being able to do this vital synthesis in this study allows for a broader look at patterns on a much larger scale, such as within the entire nation as well as a smaller scale such as in the state, in order to draw educated conclusions about the past lifeways and history associated with mineral spring resorts. In the end, being able to say something about the past is the main goal of my thesis but being able to do that in a holistic fashion is the heart of that goal.

With the goals of this thesis and the methodologies used to reach them in mind, the next chapter presents the results of the case study within a multidisciplinary framework. The resort that I have worked at and used a sort of 'test laboratory' has been a worthwhile case and will hopefully prove that an integrated study is not out of reach in future cases and studies.

CHAPTER 4: RESULTS

Since there are no extant structures at the former Massey Springs Resort, and archival evidence of only one of the two hotels, archaeology is a vital method of investigation and examination of this resource. However, archaeology alone is not the key to understanding. Using the code to a combination lock as a metaphor, there is more than one number in this code; examining our history as the lock, archaeology becomes just a number in part of the combination code. Folk studies and vernacular architecture studies are the other numbers for the code. In this chapter, I outline the results of my research on Massey Springs Resort using this multidisciplinary approach. This chapter is broadly divided into two sections, the first focusing on the archaeological results at the first hotel site and the second section focusing on the vernacular architecture findings for the second hotel. In both sections, I use folklore to develop richer interpretations.

Archaeological Results

As noted in Chapter 2, there is only one brief description of the first hotel at Massey Springs Resort. According to Potter (1904:4), the first hotel had "two large halls crossing each other [that] run entirely through the building, and the rooms are in the corners thus formed. This makes it very cool and pleasant, as the halls are open at each end." Other than this brief description, we had no other leads on the construction type, materials, or date for this hotel. We were left to rely on archaeology to evaluate Potter's description and to decipher the artifactual remains left at the site. In the case of this research project, I used archaeology to locate surface and subsurface historic remains, analyze recovered artifacts, and develop interpretations about the first hotel at Massey

Springs Resort. I focus on the physical characteristics of the first hotel, including its size and dimensions, constructions materials, and construction dates from the archaeological data. These features are pertinent for understanding the vernacular architectural form and function.

Locating the First Hotel at Massey Springs Resort

In some cases, archaeological remains are visible on the surface of an area. In the case of this project there were visible artifacts and features on the surface and so surface survey was a viable tool in the location of the resource. We knew from documentary evidence and the farm manager Mike Sympson's recollections that the hotel was above the spring. According to a resort guest (Potter 1904) and the current farm manager (Applegate 2010), there was a set of steps that allowed visitors to reach Massey Spring from the ridge top above. Once locating this general area on top of the ridge where the first hotel was situated, we identified the site based on vegetation, surface artifacts, and structural remains.

There is at least one introduced plant into the area; feral daffodils now mark the area where the first Massey Springs hotel was located (Photo 11). Along with these flowers which are often markers of homesteads (Schlereth 1980b:149), three large "yard trees" also help to delineate the location of the first historic hotel (Photo 12). Yard trees and trees that are noticeable on the landscape were used as markers for the yard area of the hotel and as historical boundaries and benchmarks (Schlereth 1980b:154), possibly when the first hotel was in operation. These trees are extremely noticeable at the site as they are much larger and older than other trees around the area. These flowers, trees, and

other floral and vegetational markers are crucial for archaeologists because they often serve as poignant markers of historic sites and site boundaries. Within the discipline of historic archaeology, they are well known signs of a historic site or feature.



Photo 11. Feral Daffodils South of the First Massey Springs Resort Hotel, View North (Applegate 2013).



Photo 12. Large Yard Tree Southwest of the First Massey Springs Resort Hotel, View Southwest (Applegate 2013).

Along with these vegetational markers, we were also able to locate the area of the first hotel at Massey Springs by searching for and locating surface artifacts and structural remains. In this case, we noticed a high concentration of artifacts on the surface of the site. These artifacts included window glass shards, ceramic sherds, and nails; all historic in nature. There were also some unknown metal artifacts that were on and imbedded in

the surface as well as a single brick, tin metal roofing material, and a leather shoe. We were also able to locate structural remains on the surface of the area where the first hotel was, namely pierstones, an *in situ* front step, and the remains of a chimney with its rubble pile. In general, we collected a plethora of artifacts from the site of the first Massey Springs Hotel, both surface and subsurface. Table 1 gives an overall view of the artifacts collected from the site and their percentages of the total assemblage. These artifacts were used for the investigative techniques in the following paragraphs.

Artifact Type	Surface		Pierstones/Chimney		Total	
	n	%	n	%	n	%
Nails	34	7.6	412	92.4	446	37.8
Drawn Wire	34	7.6	410	92.4	444	
Machine Cut	0	0	2	100	2	
Ceramics	40	63.5	23	36.5	63	5.3
Whiteware-	26	70.3	11	29.7	37	
Undecorated						
Whiteware-Decorated	4	80	1	20	5	
Ironstone-Undecorated	4	57.2	3	42.8	7	
Ironstone-Decorated	1	50	1	50	2	
Creamwear-	0	0	1	100	1	
Undecorated	0	0	2	100	2	
Pearlware-	1	100	0	0	1	
Undecorated	3	100	0	0	3	
Pearlware-Decorated	0	0	1	100	1	
Porcelain-Undecorated	1	33.3	2	66.7	3	
Porcelain-Decorated						
Coarse Earthenware- Albany Slip Coarse Earthenware- Undecorated	0	0	1	100	1	
Flat/Window Glass	65	46.8	74	53.2	139	11.8
Curved/Container Glass	153	34.4	291	65.6	444	37.6
Teal Mason	41	21.5	150	78.5	191	
Amethyst	11	61.1	7	38.9	18	
Clear	68	38.6	108	61.4	176	
Aqua	18	47.4	20	52.6	38	
Other	15	71.4	6	28.6	21	
Other	31	34.8	58	65.2	89	7.5
Metal Roofing	0	0	0	0	0	
Button	0	0	3	100	3	
Door Hardware	0	0	1	100	1	
Coal	28	57.1	21	42.9	49	
Cinder	3	8.3	33	91.7	36	
Subtotal	323		858		1181	100

Table 1. Artifact Assemblage From the First Hotel Site at Massey Springs Resort.

Dimensions and Floorplan of the First Hotel at Massey Springs Resort

Through surface survey, probing, and shovel testing, we discovered three types of structural remains that provide clues about the dimensions and layout of the first hotel: a collapsed interior chimney, pierstones, and a possibly stone step. The chimney is built with local sandstone rocks and is orientated east to west, with the hearth opening facing the west. Some of these stones are naturally shaped while others have obvious stone cutter's tool marks on them (Photo 13). The chimney appears to be a dry stone construction since we found no mortar between the stones or while excavating the chimney (Photo 14). There is a large debris pile from the fallen chimney to the northeast of the *in situ* section and some of the debris is scattered to the west of the chimney with some other further scattered stones possibly from the chimney fall.



Photo 13. Stonecutter's Tool Marks on Stone at First Massey Springs Hotel. (Applegate 2010).



Photo 14. In Situ Chimney Remains at the First Hotel Site after Excavation, View East (Applegate 2013).



Photo 15. Intact Pierstone at the First Hotel at Massey Springs, View South (Applegate 2013).



Photo 16. Subsurface Pierstone from the First Hotel at Massey Springs, View North (Applegate 2013).

Pierstones are large stones that served as foundational ties to the land on which a structure was built or placed. These foundational stones are crucial to historic archaeologists and this project because they serve as markers for the footprint of a structure. Roughly, a corner of a room exists where two walls meet or in the case of archaeological remains, where two lines of pierstones intersect. We discovered at least 11 *in situ* pierstones at the first hotel site: one apparently complete stacked stone pier visible above ground (Photo 15) and the lower stones of ten piers below ground (Photo 16). The pierstones were all made of local sandstone, apparently the same as the chimney. Some stones were naturally shaped while others were cut with stonecutter tool marks just as the some of the stones used for the chimney. The pierstones were not extremely large; the most complete pier measured 39.0 to 44.3 cm north to south and 62.5

to 45.5 cm east to west. The other piers are roughly the same size, except for one pier that has a larger stone of comparable size with a much smaller stone placed on top. All pierstones are roughly the same geometric shapes, most often rectangular in shape.

While most of the pierstones were visible on the surface, several were completely below ground; pierstone 4 in the southwest corner of the site, for example, was 11 cm below ground.

Though not all piers were located, 11 pierstones create an outline of up to six rooms or spaces comprising the first hotel (Fig. 7). The four westernmost rooms were square and mostly equal in size, measuring just over 5 x 5 meters, or 16 x 16 feet between corners. This would make the area of each room about 25 sq. m or 256 sq. feet. These dimensions are comparable to the sizes of rooms in average American homes today. These four rooms corroborate Potter's (1904) description of the first hotel.

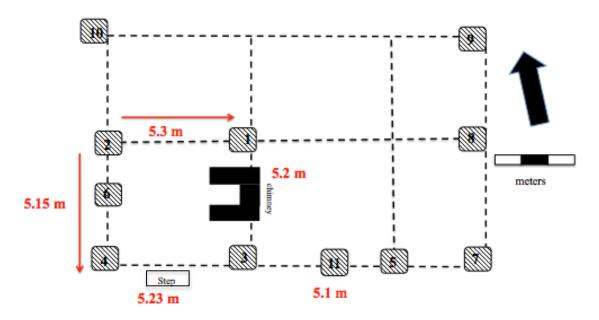


Figure 7. Proposed Footprint of the First Hotel at Massey Springs Resort (Applegate and Pinkston 2014).

The easternmost space delineated by the pierstones 5, 7, 8, and 9 (Fig. 7) was unexpected. It measures about 2.79 x 10 meters or 9.1 x 32 feet with an area of 12.79 sq. meters or 291.2 sq. feet. This part of the hotel may be two additional rooms or an attached porch. If the former is the case, each rectangular room measured about 3 x 5 meters or 9 x 16 feet for an area of 15 sq. meters or 144 sq. feet, making them slightly smaller than the four westernmost rooms. The rooms could have been used for residence, food preparation, and/or storage by guests, the Massey family, and/or resort employees. On the other hand, the space could have functioned as a porch, which would be in keeping with mineral spring resort hotels of the era. Hand excavations in this space likely would produce artifacts useful for testing these two hypotheses.

Based on all the pierstones, the overall dimensions of the first hotel were 10.15 x 13.09 meters or 33.3 x 42.9 feet, for a total area of 132.8 sq. meters or 1428.57 sq. feet. The long axis was oriented about 10 degrees off east-west or N80°W. Based on the small sizes of the pierstones, the hotel likely was a one-story structure. It is likely that the structure had a simple roofline with gable ends on the east and west façades.

The third structural element discovered at the first hotel site is a large, flat rock interpreted as the lower course of a stacked-stone step into the south-central room with the chimney (Photo 17). This stone is local sandstone, measures about 86 cm x 47 cm and has a flat surface. It is not just a natural rock lying on the surface but is firmly placed in the ground. Due to freeze and thaw action during the winter months, the stone was broken into two pieces, which are separated 20 cm apart from one another.



Photo 17. Photo of the Front Step at the First Hotel at Massey Springs, View North (Applegate 2013).

Construction Materials of the First Hotel at Massey Springs Resort

A second question about the first hotel is materials from which it was constructed. Regarding the foundation, as noted previously, the first hotel was supported by a series of pierstones made of natural and rough-cut sandstone. As the ridge bedrock is sandstone of the Lower-Middle Pennsylvanian Tradewater and Caseyville Formations (undifferentiated), this material was locally available and easily accessible (Shawe 1966). Large pieces of sheet metal present on the surface and below surface at the site indicate the first hotel had a tin-coated steel roof.

Regarding materials used to construct the framework and siding of the first hotel, one secondary source claimed it was a log structure (Sumpter 1976). It is unclear if this

was an assumption or a fact based on actual evidence. Alternatively, the first hotel could have been frame or sawn lumber construction (brick or stone construction seemed unlikely given visible remains at the first hotel site). We considered these options as we conducted our field investigations.

Several lines of evidence indicate the first hotel at Massey Springs Resort was a frame structure. While we were excavating the subsurface pierstones and the interior and outside perimeter of the chimney remains, we recovered large numbers of nails.

Typically, one would not expect to find such a high concentration of nails if the structure was made of logs. Log or heavy timber structures are generally sturdy with alternate means of conjoining structural elements; hence they are built with few nails, or at least fewer than recovered at the first hotel site. In addition, several nails recovered while excavating pierstones and the step were attached to burned pieces of sawn lumber (Photo 18).



Photo 18. Carbonized Wood with Attached Wire-Drawn Nail from the First Hotel at Massey Springs (Pinkston 2013).

Further, metal detecting across the site revealed high concentrations of metal objects in narrow, linear swaths between pairs of adjacent pierstones. Shovel testing revealed numerous nails, rather than other types of metal objects, in these linear strips.

The locations of these nails, as well as their penny weight, suggest weatherboarding and a frame structure. Finally, the distribution of nails across the site indicates that the entire structure was frame, rather than a combination of frame and heavy timber.

Construction Dates for the First Hotel at Massey Springs Resort

Another research question concerns the construction date of the first hotel at Massey Springs Resort. Was an existing, pre-1890s structure converted into the hotel, or was the structure built to serve as a hotel at the time the resort opened in the 1890s? In this research project, I used four methods to generate dates for the structure: container glass artifact colors dating, nail chronology, Moir window glass dating, and mean ceramic dating.

During the excavation of pierstone perimeters and surface collection of the site, we collected a large amount of teal Mason jar shards. While Mason jars seem inconspicuous and possibly even ubiquitous to us today, finding these shards in an archaeological context is significant for the time range of use and/or construction. Specifically, the color of the Mason jar is what makes it chronologically diagnostic for the site. Teal jars were only manufactured for a short period of time, between the 1890s and 1930s. The large majority of Mason jars today are lighter in color and referred to as aqua (Longmire, personal communication 1999), so finding teal glass shards is an important chronological marker for the first hotel.

Amethyst-colored glass was created by adding either nickel or manganese to the silicon dioxide before vitrification (Berge 1980, Munsey 1970). The date range for amethyst glass is 1880 to 1925 (Newman 1970), however, there has in recent years been

some problems with using this glass color for dating, as the previously thought beginning and end dates have been moved and re-evaluated (Lockhart 2006). Amethyst glass was well established by the 1890s and was being phased out by the 1930s. Like the teal Mason jar shards, amethyst glass collected at the site gives another range of years; luckily, the two coincide. These two types of artifacts, therefore, provide comparable date estimates for the first hotel at Massey Springs Resort.

Along with glass shard colors, another temporally diagnostic artifact type recovered from the site is nails. We have collected 446 nails from surface contexts and pierstone excavations; the majority of these nails were drawn-wire (n=444) with the occasional exception of a machine-cut nail (n=2). Therefore, the first hotel was either constructed or remodeled in or after the 1880s or 1890s. Remodeling seems unlikely, however, since the percentage of earlier machine-cut nails is so small.

The third dating technique uses window glass shards and a regression formula to calculate a year or manufacture. I selected all 139 window glass shards as my sample. Their thicknesses ranged from 1.3 to 3.1 mm, and their average thickness is 2.2 mm. The Moir window glass date is 1904 ± 5 years or 1899-1909. I used the Walker mode method as a secondary technique for dating the window glass; however, after constructing the histogram and evaluating the thickness intervals, I found that a date could not be given because it exceeds the time span given by the formula. 13

The final archaeological dating technique that I used to calculate a date for the assemblage of artifact associated with the first hotel at Massey Springs was the mean ceramic date model. The assemblage from the first Massey Springs hotel had a total of

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¹² See appendix D for calculations.

¹³ See appendix D for calculations.

13 different ware or decoration types (Table 2). For the first hotel at Massey Springs, the mean ceramic date that I calculated was 1897 ± 10 years or 1887 to 1907.¹⁴

Type of Ware or Décor	Number of Artifacts in Assemblage
Whiteware – Plain	36
Whiteware – Shell Edge	2
Whiteware – Embossed	3
Whiteware – Blue Glaze	1
Whiteware – Blue Shell Edge	1
Porcelain – Plain	3
Porcelain – Underglaze Decor	1
Ironstone – Plain	7
Ironstone – Underglaze Décor	1
Creamware – Plain	1
Pearlware – Plain	3
Coarse Earthenware – Albany Slip	2
Coarse Earthenware - Plain	1

Table 2. Types of Ware and Décor in the Ceramics of the Artifact Assemblage at the First Massey Springs Hotel.

To synthesize the chronological evidence, teal Mason jar and amethysts container glass colors yield dates of the 1890s to 1930s. Nail chronology warrants the date of post 1880s-1890s due to the predominance of wire nails rather than cut or forged nails. Finally, window glass shards and the Moir formula give us a date of 1899-1909. Finally, the mean ceramic date is 1887 to 1907. These four lines of evidence provide comparable results. A final date range that combines all the techniques and methods used is 1880s to the 1930s, with a likely construction date in the 1890s. As such, the archaeological evidence indicates that Melvin James Massey constructed the building soon after he purchased the property. He did not convert an existing structure into the hotel.

¹⁴ See appendix D for calculations.

Site Use and Function

Using the South (1977) model, artifacts from the first hotel site represent the kitchen group, including the ceramic, pharmaceutical type, glassware, and kitchenware subgroups; the architectural group, including the window glass, nails, construction hardware, and door lock parts subgroups; the arms groups, specifically the shot subgroup; the clothing group, specifically the button subgroup; the personal group, specifically the coins and personal items subgroups; and the activities group, specifically the construction tools, ethnobotanical, stable and barn, and the miscellaneous hardware subgroups. The artifact assemblage represents six of the nine groups.

The artifact assemblage from the first hotel site represents 10 of the 14 functional groups in the McBride and McBride (2008) model: dwelling and providing shelter; food preparation, storage and/or consumption; clothing use or manufacture; armed conflict; hunting and trapping; medical treatment and medical care; personal status maintenance and social activity; entertainment; manufacturing; and moonshining.¹⁵

Taken together, the activity groups and functional categories represented at the first hotel are typical of a residential site. Though there were many activities, the two predominant ones represented in the artifact assemblage are food and dwelling related. As both models indicate, there were food preparation or kitchen related activities based on ceramics, container glass, including canning jars, and some food remains. Of course the site had architecture/dwelling and fuel functions as evidenced by structural remains, window glass, nails, doorknobs, and coal and wood cinders.

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¹⁵ See appendix for full listing of the McBride and McBride model.

Folklore and the First Massey Springs Hotel

Although the first hotel at Massey Springs does not have a rich record this does not mean that archaeology is the only method to use to study this site and its uses in society. Specifically, folklore and vernacular architecture studies can also be used to study this site using the archaeological results.

Even though we have no historic photographs, postcards, or accounts of the actual structure, we can still make conclusions about the form of the hotel using what we have learned from the archaeology in conjunction with typical resort characteristics such as the North and South Models discussed in chapter 2. Thinking back to these two types, the first hotel at Massey Springs exhibits some of the characteristics of the South resort model: the low rise form and the integrated and blended feel of the hotel into the natural surroundings. Both of these characteristics were vital to the South model. The open hallways and possible porch allowed visitors to feel nature even when they were in the building. Potter (1904) even made a point of saying that the hotel was "surrounded by tall forest trees." More broadly, visitors left the familiarity of the river and entered a forested world when they went to the hotel. The hotel was positioned to put guests in the middle of nature, not in a location that would be easiest for guests to get to or from. The first hotel put visitors right in the middle of nature, so they could experience it in all directions. They had commanding vistas and views to the north and south. They would have descended into the natural world of the main spring form their ridgetop above, which may have heightened the mystique of the experience. Thinking about vernacular architecture and the location of the hotel can help to enhance what we know about the first hotel from archaeology and add on to our interpretations.

Vernacular Architecture and Folk Studies Results

While the archaeological investigation and analysis yielded important insights about structure form, construction materials, construction date, and function of the first hotel site, there is more that can be learned about Massey Springs Resort. Additional insights can be obtained from analysis of vernacular architecture and vernacular practices. Again, while archaeology has been presented here and stands as a pertinent discipline to use to examine a historic mineral spring resort such as Massey Springs, it is not the only useful lens through which to study the resort. For the first hotel site, archaeology provided the primary means to learn about the hotel during the first phase of the resort. To learn about the second hotel and second phase of the resort, I employed vernacular architecture and folk studies based on primary and secondary historical records.

As noted in Chapter 2, the architecture of mineral spring resort hotels is specific, but even more so in the somewhat isolated region of south-central Kentucky. I am not saying that styles, forms, and ideas did not travel, because they did, but rather mineral springs in this area (and I will later assume that this is also true for a larger area in the Upper South) have a very specific style and form that makes them unique and vernacular to the region.

To facilitate my goals I began by surveying a larger region of south-central Kentucky looking for other mineral spring resorts by conducting archival research with primary documents like newspapers, secondary sources such as county histories, and photographs. As mentioned in the previous section, mineral spring resorts and hotels were a rather popular vacation option in the area as well as in other states including

southern Ohio, southern Indiana, parts of north and western Arkansas, northern Tennessee, West Virginia, and parts of western Virginia. Following the ideas of scholars before me, I am calling this region the Upper South¹⁶ after Glassie's Upland South (1969:39) and view it was a distinctive region in relation to mineral spring resorts and hotels.

Because nearly all the hotels are now gone, my analysis of architectural variation in south-central Kentucky mineral spring resorts is based on visitor accounts, postcard images, and photographs. Though there are numerous similarities, accommodations at south-central Kentucky mineral spring resorts varied by time and location. Cabins are associated with the more rural resorts. In most cases, the earliest resort operators housed guests in cabins. At these resorts, hotels later replaced the cabins, and resorts that opened in the Postbellum period only used hotels. The predominant construction material was frame, although it is possible that some of the earliest hotels and cabins were log structures, as they are quicker to construct. There were some examples of construction materials that were not wood; a hotel was built of brick and a limestone structure were documented in the survey. It is important to note construction materials because, often, these are thought to reflect or embody folk or vernacular ideas. I would assume that the use of wood versus brick or limestone blocks would be examples of some sort of cultural ideas being used or conveyed with these forms of building materials or just general changes in materials (Applegate and Pinkston 2013).

Style and form are two vital aspects of architecture, especially vernacular architecture that come into play when discussing mineral spring resorts. These aspects

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¹⁶ See Appendix A for illustration of the location of the Upper South.

become very evident when examining architectural features that are added on the hotel structures or stylistic additions and changes to the exteriors. A specific example that I will come back to later is the veranda or the extended porches that all mineral spring resort hotels that I have examined use extensively. This category would also include other features that are used on the hotel structures, including window and door patterns and stylistic features that are applied (and possibly changed) over time. These features are crucial in the examination of the "vernacular-ness" of these structures because they also reflect some sort of vernacular or folk body of ideas and assumptions.

The vernacular aspect of these structures is not limited to the hotel itself. Types of structures tend to be vastly similar at nearly all resort hotel sites in the survey area, however, there are some examples of changes in the types of structures located, whether it be just a hotel or a hotel plus other built structures like gazebos or dance pavilions. While this is a pertinent area of study, I do not fully address this area of study in this research project or thesis. Perhaps this could be a line of investigation for future scholars to follow in order to enhance what we know about these types of recreation and tourism sites.

Architectural Features of the Second Hotel at Massey Springs Resort

To begin, we will examine the form of the second Massey Springs hotel as much as possible based on historic accounts and photographs (Photo 19). The second hotel at Massey Springs resembles an extended I-house form in that it is elongated and relies on a central passage. It is not difficult to see the resemblance to this common vernacular form in this hotel.

Since researchers have not named a general form type for mineral spring resort hotels for this area, it can be difficult to discuss. Elements of the form are scattered and not grouped into one general type. In a text on the Antebellum architecture of Kentucky, however, a brief section describes mineral spring resort hotels in Kentucky as tending to be narrow and elongated structures with one to three stories, and usually have extensive open porches with slender posts and railings (Lancaster 1991). In addition to this formal pattern, Lancaster notes that the large majority of these structures belong to the frame construction tradition more than any other building material.



Photo 19. Undated Photo of the Second Hotel at Massey Springs Resort, View Southwest (Sumpter 1976).

As for the plan of this structure, we must look back to the form of the elongated I-house and focus on the central passage. I would assume that the front doors pictured in the photograph led into a central passage, which would include a staircase leading to the upper floors. A secondary source that discusses the layout of the hotel in regards to

social activities states that the hotel contained 34 guests rooms plus six bachelor's suites and the first floor included a large dining room that measured 56 x 20 feet (Raymer 1997:34). Although very little is known about the actual plan of the structure, hypotheses based on common architectural plans in the area and for hotels of this sort can be created, especially since we know from sources that the second and third floors were for bedrooms and bathrooms. As shown in Photo 19, there is a change in window form in the left side of the building, suggesting that this is where the aforementioned dining room was located. Raymer (1997) also noted that the kitchen was an addition measuring 20 x 20 feet, which likely corresponds to the addition on the far left side of the hotel (Photo 19). This would also make sense if the dining room were also in that vicinity. While it is impossible, at this point, to know the full plan of the hotel, but some elements are clear from sources and photos.

The second Massey Springs hotel illustrates the problem of a structure not fitting into one style for this structure specifically, the styles seem to be overlapping or pieced together. It would be impossible to assign only one architectural style to the second Massey Springs hotel, but rather we must take it apart at its elements and features starting with the most obvious and important stylistic feature, the full verandas. These open gallery porches or promenades serve a utilitarian purpose but they also lend to a specific style. Namely, the full verandas suggest influence from the Southern states. Structures in the Mississippi delta and river areas were specifically known to have extended porches as a common and often main feature. However, the full history of the porch/gallery/veranda is often too muddled to understand fully because the architectural feature has been adopted as far north as Quebec in some cases (Edwards 1989:3-5).

Edwards narrowed down a time period within which the porch was added to architecture and has traced down several hypotheses on the origins of this form which suggest European Neoclassicism (1989:17), Western European gallery origins (1989:19), West African origins (1989:23), Brazilian origins (1989:29), Italio-Hispanic villa-palaces origins (1989:31), military origins (1989:33), and North America Creole origins (1989:37). By the end of this list, it becomes clear that the origins of the feature are not clear. It is possible that all of these architectural origins are actually a collage of the origin of the porch.

Many structures that incorporate these galleries are often tied to other stylistic elements common to French styles but this is not a fool-safe statement to make. The French influence is probably due to the fact that in the southern regions of the Mississippi River, namely the delta and the floodplains flanking the river, the influence came from the Caribbean. This area also probably had heavy French influence from the onset of colonialism as well as Spanish and Portuguese influence. If you look closely, I think you can see all of these possible origins in the architectural addition.

Along with the verandas, other features that make a strong appearance are the relatively shallow or flat roof and the central-center gable, which resembles a shallow cupola, both of which suggest Italian influence. Overall, the entire structure has a somewhat blocky appearance, which is also common of Italianate architectural styles. In the end, the architectural style is a general *bricolage* of features from other styles.¹⁷

Because of the "pieced together style" that the second Massey Springs hotel has, it would be possible to see the style used on the Massey Springs hotel as a sort of

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¹⁷ See appendix A for other photos of the second Massey Springs Resort hotel.

vernacular *bricolage*. *Bricolage*, coming out of the work of Levi-Strauss, is the assembly of preexisting parts to make a different whole (1969). Hubka (1979) describes this idea of *bricolage* and its inherent vernacular as being a folk or vernacular phenomenon explained in a way that can also be applied to style, but not form. In his ideas, form is vernacular or folk because people create their structures (without the help of professional architects) by using the already evident and learned systems of architecture from their culture.

Just as Glassie pointed out in *Folk Housing in Middle Virginia* (1976), people will generally select specific architectural elements - whether it be form, plan, or style - that have been tested by the community over the generations to use for new architectural constructions. As Glassie refers to this as a grammar, I would concur that in some cases the specific features that are selected and re-selected with time do serve as a sort of grammar for architecture of an area. But this is not to say that change does not or cannot come into a community or region; change is inevitable, but it seems more than likely that it will persist in remnants of past architectural elements and features. This is the essence of what makes structures such as mineral spring resort hotels vernacular in nature.

CHAPTER 5: CONCLUSIONS AND FINAL COMMENTS

As previously discussed, this thesis uses multiple disciplinary approaches to investigate and analyze two hotels at Massey Springs Resort, a historic mineral spring resort in Warren County. Multiple approaches were necessary because there are different lines of evidence for the two hotels. In the case of the first hotel, there is no extant building and few archival records; my research, therefore, required the use of techniques that look on and below the ground surface and analyze material culture artifacts in order to extract some information, archaeology. The second hotel, with its comparatively rich archival record, can be studied with vernacular architectural studies and folk studies.

Types of Mineral Spring Resort Hotels in the Upper South

As a partial product of this research project, I wanted to create a typology that would encompass mineral spring resort hotels in south-central Kentucky. A typology, or general classification scheme based on features, would help to identify the vernacular architecture forms of these structures and provide a template upon which to compare these structures across space and time. This typology could be compared to other historic mineral spring resorts in areas where the tradition is much older, such as in the upper Northeast, areas of upstate New York, and the upper Appalachian Mountains in Maine, Vermont, and New Hampshire, as well as the Upper South.

To begin, this typology first considers the general form and plan of these mineral spring resorts. As discussed in the previous chapter, there is a general form to these structures. They are elongated and low-rise in form. They almost always have full verandas to be used by the guests as a form of recreation and socializing. The posts and

railings are often slender and non-imposing and they are usually of timber construction. As for style, there is a general mixture of several styles. In some cases, there is a heavy use of Greek Revival stylistic features, including a front pediment and Greek columns. In other cases, there may be a heavy use of Gothic elements, French elements, or even Colonial elements. This combination of styles is just as in the case with the second Massey Springs hotel, where the overall style of the structure is actually a *bricolage*.

The initial division in the proposed resort hotel typology is based on the sphere of influence for a hotel with either a northern model or a southern model. In the northern model, the structures generally have a more metropolitan feel or urban hotel look compared to those of the southern model, which focus more on the scenery included with the hotel, an atmosphere that is akin to what we would associate with the old South. In the case of south-central Kentucky, the large majority of mineral spring resort hotels were based on the southern model. A notable exception is the New Century Hotel at Dawson Springs, which was based on the northern model which incorporates Queen Anne Style, along with other "high" styles that give the structures an ornate feel, by using turrets, towers, and sporadic structuring. The southern model is more commonly used in this area and focuses on the non-ornate stylistic features. Often the structures incorporate Greek columns and simple veranda ornamentation. The second Massey Springs hotel fits this model very well.

This research project has generated a large amount of data and information about the cultural history of mineral spring resort hotels in general and the Massey Springs Resort in particular. However, there are many ways the research can be improved and expanded. Specifically, there are still many gaps in the historic record even after using

multiple disciplinary approaches to discover it. The work and research that I have done does not cover the vast amount that is needed to fully understand the cultural history of the Massey Springs resort hotel site. Specific examples of how this study was lacking and could be improved for the first hotel could include:

A more in-depth search for archival evidence related to the first hotel. More work needs to be done with deed records, for example. Alongside deed records, a more indepth search for other records relating to the first hotel could be the focus of new research and review. I am hopeful that photos, postcards, journals, and personal correspondences exist somewhere in lost stacks of artifacts in our local archives, county museums, and people's attics.

The site of the first hotel could also warrant more in-depth archaeological studies of the hotel structure itself and the area surrounding it. At the hotel, lateral excavations within the footprint could produce additional evidence about the construction date, room functions, and the lifeways (e.g. subsistence, socioeconomic status, consumerism) of the resort visitors, proprietors, and employees. Further, more archaeology is needed for the first hotel site in order to get a better understanding of the actual area of the site. At this point, we do not know the full site boundaries.

Around the hotel, with such a short time-span for research, Dr. Applegate and I were only able to survey a small portion of the landscape where the first Massey Springs hotel was located. Given the relatively small size of the structure we located and the general patterns found culturally that relate to structure use, we believe that there may be other structures and features that we have yet to locate. We think the hotel probably made use of an unattached kitchen structure and possibly other structures to house

workers or caretakers. Since the main structure was a hotel, it would be logical that there would need to be some sort of cellar, springhouse, or storage outbuilding for keeping foodstuffs for the season. We would also presume that the hotel would need some sort of privy outbuilding for guests since I doubt that the first hotel structure had such a room. Along with the outbuildings, it would also make sense that some sort of agricultural remains exist at the site since the hotel manager had to feed those who stayed there. Of course, this is contingent upon other factors, including whether or not the manager grew and raised his or her own food for the hotel or if goods were bought from nearby towns and communities.

Other remains and archaeological that could add more data to this interpretation are historic roadbeds and hiking trails (if they are still evident on the landscape) used by guests to explore the area and make the trek down to the spring, as well as picnicking areas using by guests. I have added guest picnicking areas to this list not arbitrarily, but because a photo exists, that shows guests sitting under large tents picnicking at the Massey Springs Resort (Jeffrey 2006). This 1898 photo (Photo 20) is dated to when the first hotel was in use. Sadly, the picnicking area seems to not be immediately near the hotel structure. It would helpful to survey for artifactual remains of these activities; one possible location is marked by a surface accumulation of tin cans at the edge of the ridge top overlooking Ivy Creek, to the southwest of the first hotel site.



Photo 20. 1898 Photo of Picnic Group at Massey Springs (Jeffrey 2006).

A more intensive archaeological study of the material culture of the site could yield better or larger amounts of data to aid in understanding the cultural history of the site and of mineral spring resorts of south-central Kentucky in general. This would include examining the assemblage of artifacts and drawing conclusions on the social class, use of artifacts, and possibly even the density of use. Eventually, this could tell us who visited the mineral spring resort hotel and possibly, when during the year they may have visited.

A better understanding of variation in mineral spring resorts and hotels for this time period, the late 1800s to early 1900s, would also be a welcome addition to the Massey Springs research and any other done in the future. This additional research would ideally use similar or the same methods as those presented in this thesis. At this

point, little is known for sure about such recreational sites, especially those outside the Bluegrass Region. This expanded understanding could shed some light on the vernacular architecture of the first hotel by studying other hotels similar to Massey Springs in the area. Where I currently have very little information, there could be more on basic form, plan, and style. I have begun to examine other hotels but I have yet to completely draw all the conclusions for corollaries between hotels in order to get a sense of the architecture of the first hotel.

Better oral history sources would also benefit this research project and provide more information about the hotel and its uses. This however, is a problem that may have already exhausted sources since the structure dates the late 1800s and early 1900s, I would assume that very few, if any, visitors to the hotel are still living. There is always the possibility of people who could have stories told to them from original visitors, but locating these informants and soliciting second hand stories is a task that requires more time and resources but is an option.

The first Massey Springs hotel site is not the only part of the larger historic archaeological site that warrants a closer examination, however. The site of the second hotel is also overflowing with potential for more closer and in-depth studies related to the structure itself and the cultural history of mineral spring resorts and hotels in southcentral Kentucky. Some goals to consider for further research include:

Using archaeology at the site of the second hotel to locate its footprint and other features and structures. With the few photos and postcards that exist, we get a limited view of the structure itself and its associated features and outbuildings. Archaeological survey could yield more data on the floor plan of the hotel structure by locating possible

structural walls. Along with actual structural features, archaeology can be used within specific areas of supposed rooms in order to verify use and occupation. For example, conducting survey where the kitchen was located should logically contain a high concentration of kitchen artifacts. The yard of the hotel has been shown in postcards and contained expansive landscaping, pathways, light posts, and gaming areas, and there should be archaeological traces of these features.

Although not visible on the surface today, archaeology could explore these areas. This could be possible since the river frequently floods and deposits a fine layer of fluvial silt on the landscape; these deposits of sediment likely have helped to preserve these landform features. Archaeology could also be of importance when looking at the river and where the dock/boat landing and bathing beach were located.

Since the second hotel was operated into the early 1900s, there is a much better chance that visitors or employees may still be alive or that second hand stories are still available. This is important because the role of folk studies could be more realized with this research project if more oral history sources were available. Soliciting these stories could involve posting advertisements in the local newspaper asking for informants, looking through archived journals and personal correspondences, or even visiting community meeting places such as churches. This possibility to collect more information seems extremely viable for this research project in the future.

There is a much stronger possibility of examining the architecture of the second hotel than the first. Although I have already done a considerable amount with the architecture of the hotel (using photos and postcards), there are still other ways to examine the structure and develop more conclusions. A possible approach to take would

be to examine the architecture of the structure and compare it to others in the area not already covered in this project, as well as those in the Bluegrass and Eastern Coalfields regions of Kentucky and the remainder of the Upper South region proposed earlier in this thesis. This technique is the same as what was proposed for the first hotel, but this case would be much easier as actual photos still exist. In the end, cultural forms and use could be determined more easily with the second Massey Springs hotel.

A secondary aspect of mineral spring resorts that I do not pursue in this project or thesis but would like to in the future is tourism. Related to social use of these sites, tourism would be a fascinating lens through which to view leisure and recreational activities and sites of these functions. There are many examples of how mineral spring resorts and hotels helped to shape what the idea of tourism was in the historic past, but also the ideal of tourism helped to shape what these destinations were to be (LaMoreaux 2001). In line with some of Chambers' ideas on class and status creation, I believe that tourism is the driving force behind the creation or solidification of idealized social classes in the Postbellum subperiod and on into the Industrial and Commercial Consolidation subperiod. This, of course, has never stopped, as we still travel to what are thought of as "tourist destinations" and buy into the idealized tourism scheme that involves traveling and buying into the other culture you are visiting. This concept was central to mineral spring resorts; people were expected in the summer, to travel over rough terrain or rivers for days in order to reach their desired summering spot. Then, as is the case at mineral spring resorts, they were expected to take the waters--to buy into what the idealized form of recreation and relaxation was at the time.

In the end, this research project is an important addition to scholarship in any of the aforementioned disciplines or fields of study because it demonstrates the necessity of using multiple approaches to create a holistic summary of our history. In this case specifically, without all of the disciplinary approaches used, the results and conclusions, in the end, would have been missing some vital aspects that were explored here. Without the use of archaeology, the construction materials and possible floor plan for the first Massey Springs hotel would not have been discovered. This is especially true since currently only one short description of the hotel exists. This description, however helpful, does not give us information about construction materials, size, or construction date. In this case, we would have lost crucial details about the vernacular aspects of the structure.

My hope for this thesis is simple; I would like it to become a model that is used later in other multidisciplinary studies. I believe that it is important to see what is being produced in each of the discussed disciplines and to look at those faults that exist due to the non-comprehensiveness of using one discipline. A schism of sorts exists between archaeology and folk studies, I feel, and this is what is helping to exacerbate single-disciplined studies and research, which in the end works temporarily but when asked for the larger, more holistic picture of the social and physical aspects, does not work. My wish would be that this thesis presents a way to look across discipline boundaries and focus on the actual history and lifeways of people in our past, or essentially, our past. At the end of the day, we only do ourselves a disservice by focusing on one side of the story; we give ourselves a lopsided and possibly misguided image of our history and heritage when we focus on one side or the other as has been done much in the past.

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-----2014. Man-made Spring Addition at the Massey Spring. Photograph. Personal

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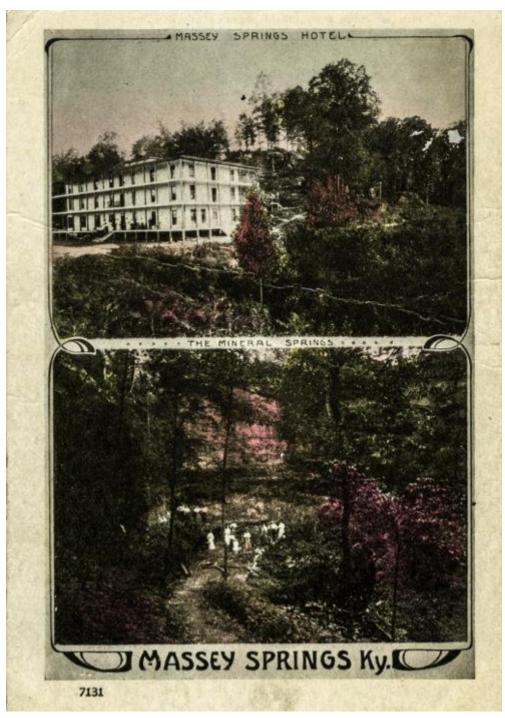
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APPENDIX A: OTHER PHOTOS AND FIGURES



Historic postcard showing the second Massey Springs Hotel (upper image) and the area where the main mineral spring is located (lower image).



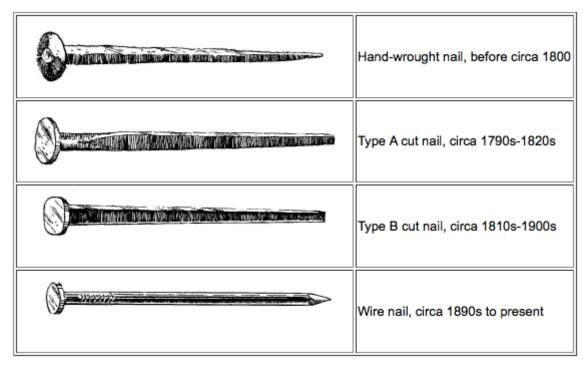
Historic photograph showing the second Massey Springs Hotel, north and west elevations.



The Upper South Cultural Region, as defined by Glassie in Relation to Material Folk Culture (Glassie 1969: 39).

APPENDIX B: OTHER ARCHITECTURAL AIDS AND ILLUSTRATIONS

Nails



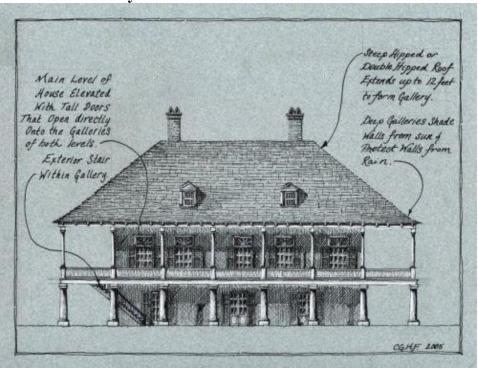
Three types of nails. (Visser 1997).



Three types of nails: wrought (top), cut (center), wire (bottom) (Glasgow Steel Company 2014).

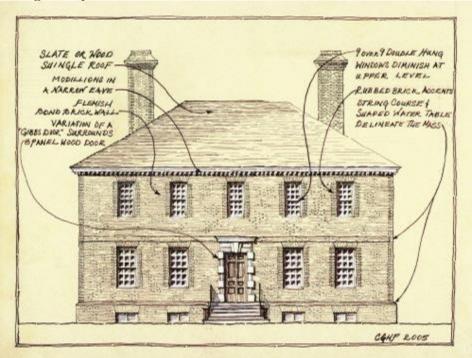
Architectural Styles

Colonial French Style



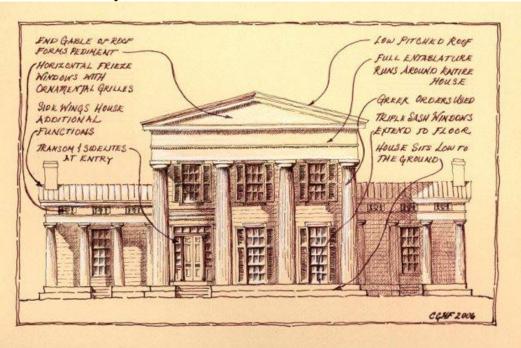
(Franck 2011a).

Georgian Style



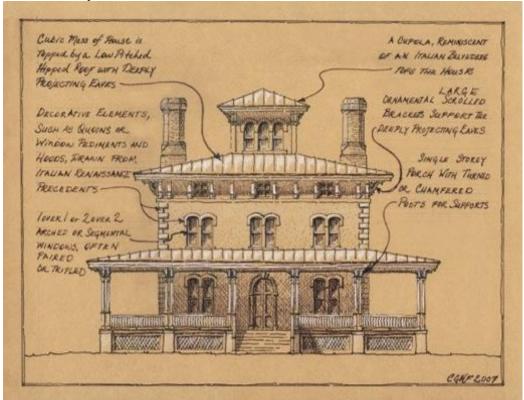
(Franck 2011b)

Greek Revival Style



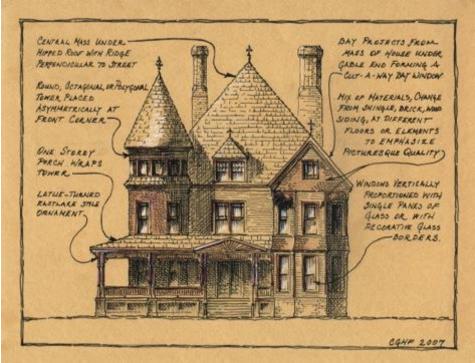
(Franck 2011c).

Italianate Style



(Franck 2012b).

Queen Anne Style



(Franck 2012a)

Stick Style



Photography of a hotel in Ocean Grove, New Jersey demonstrating Stick Style decoration. This example is very similar to examples presented in this thesis. (Poppeliers and Chambers 2003).

APPENDIX C: ARTIFACT INVENTORY

Massey Springs Hotel #1 Field Sample Inventory

FS	litory				
#	Date	Туре	Depth	Provenance	Artifacts
		Surface	- I		
1	10/8/10	collection	_	Chimney foundation	1 flat glass shard
		Surface		Dirt pile 6 m W of	1 shard (container), 1
2	10/8/10	collection	_	chimney foundation	sherd
		Surface		N-NW/downslope of	
3	10/8/10	collection	_	chimney foundation	2 shards (container)
				1.95 m S x 3.58 m W	4 shards (3 container, 1
				of SE corner of	flat), 12 wire nails, 1
4	3/9/13	-	-	chimney foundation	burned wood frag
				4 m SE of SE corner	1 porcelain door
5	3/13/13	-	-	of chimney fnd	handle/knob fragment
					3 shards (4 flat, 1
		surface		N and E of chimney	container), 1 wire nail, 2
6	3/13/13	collection	-	fnd	sherds
				1.55 m S and 2.0 m	5 shards (4 flat, 1
		surface		W of SE corner of	container), 1 glass bottle
7	3/13/13	collection	-	chimney fnd	neck/shoulder
				1.65 m E and 3.65 m	135 mason jar shards, 1
				N or SE corner of	shard (container), 1 coal,
8	3/13/13	-	surface to 3 cm bs	chimney fnd	1 projectile pnt base
		surface		dirt pile W of	3 shards (container), 2
9	3/13/13	collection	surface	chimney fnd	sherds, 5 coal
				1.9 m S and 2.75 m	
				W of SE corner of	12 wire nails, 3 shards
				chimney fnd (soil	(flat glass), 1 sherd, 3
10	0/10/10		1 1	above small flat ss	wood/burned charcoal
10	3/13/13	-	1 to 6 cm bs	rock (step?))	chunks
				5 Of an W. of NE alica	16 wire nails, 1 wire nail
			14-4124-14	5.85 m W of NE pier	with burned wood, 13
11	2/12/12		1 to 4 and 3 to 14	stone NW of chimney	burned wood/charcoal
11	3/13/13	-	cm bs	fdn	chunks, 5 shards (flat) 13 container shards, 4
					· ·
					flat shards, 2 bottle necks, 6 sherds, 1 milk
					glass décor element, 1
					milk glass canning jar
					lid liner frag, 1 coal, 1
		surface			burned wood/charcoal, 1
12	4/7/13	collection	-	N of chimney fnd	bone frag
12	1/ // 13	surface		1, or chilling the	5 flat shards, 1 burned
13	4/7/13	collection	_	S of chimney fnd	wood/charcoal
10	1, 1, 13	1 20110011011	<u> </u>	~ 51 cmming ma	o ou, onaroun

				I	10
					10 container shards, 4
		C			flat shards, 4 sherds, 1
	4 (= /4.0	surface			coal, 1 burned
14	4/7/13	collection	-	E of chimney fnd	wood/charcoal
					3 container shards, 1 flat
					shard, 1 milk glass
		surface			canning jar lid liner frag,
15	4/7/13	collection	-	W of chimney fnd	1 sherd
				soil inside chimney	
16	4/7/13	-	-	fnd	1 burned glass shard
					4 container shards, 2 flat
				soil outside chimney	shards, 4 wire nails, 1
17	4/7/13	_	-	fnd	sherd, 1 coal, 1 flake
					27 wire nails/fragments,
				2 rocks (step?) SW of	1 flat shard, 1 container
18	4/7/13	_	_	chimney fnd	shard, 1 HD flake
10				2 rocks (step?) SW of	
19	4/7/13	_	_	chimney fnd	6 wire nails
17	1/ 1/ 1 3			chining ind	5 cinder frag, 2
					container shards, 10
20	5/24/13		surface to 2 cm bs	N of chimney	nails
20	3/24/13	_	Surface to 2 cm bs	IN OI CHITIMEY	35 nails, 6 shards (4 flat,
					2 conta), 1 cinder frag, 1
21	5 /0 A /1 0		6 . 2 1		flake, 1 sherd (ironstone
21	5/24/13	-	surface to 3 cm bs	S of chimney	with floral pattern)
					5 cinder, 1 shard, 1
					chunk, 1 bone fragment,
	~ (0.4.(1.0				1 point (broken Pine
22	5/24/13	-	surface to 3 cm bs	S of chimney	Tree of Kirk Corner)
					6 shards (3 flat, 3 conta),
23	5/24/13	-	surface to 4 cm bs	W of chimney	1 sherd, 31 nails
					1 comb, 1 file, 6 contan
					shards, 1 bullet butt, 7
					flakes, 1 chunk, 5
					nuts/shells, 2 cinder, 29
					nails, 5 misc metal, 1
24	5/25/13		-	inside chimney	button frag, 1 sherd
					3 nails, 1 coal, 1 metal
					nut?, 1 shoe frag, 33
					shards (5 flat), 1 glass
					lid, 3 flakes, 5 sherds (2
					ironstone, 2 porcelain,
					fine
		surface			earthenware/pearlware?)
25	5/25/13	collection	-	surface collection	, 1 kettle frag
					1 weight, 35 nails, 1
					button, 1 wheat penny, 1
	12/18/1		surface to 6.2 cm		scraper, 4 shards (1 flat),
26	3	_	bs	SE pierstone/PS3	3 coal
		İ			

				I	2 humad wood 10 noils
	12/18/1				2 burned wood, 10 nails,
27			aumface to 2 cm ha	NW migrators/DC2	3 container shards, 1
27	3	-	surface to 2 cm bs	NW pierstone/PS2	flake
	10/10/1		C	SE pierstone/PS3	
20	12/18/1		surface to 6.4 cm	secondary stone	
28	3	-	bs	excavation	4 nails, 1 container shard
		_			4 shards (1 flat), 1 sherd,
	12/18/1	surface			2 metal misc, 1 gun shell
29	3	collection	-	SW surface collection	frag
					1 metal misc, 12 shards
					(2 flat), 2 sherds, 2 coal,
	12/18/1	surface			1 milk glass canning jar
30	3	collection	-	SE surface collection	lid liner frag
	12/18/1	surface		NW surface	3 container shards, 1
31	3	collection	-	collection	partial shoe
	12/18/1	surface			6 shards (3 flat), 1 nail, 1
32	3	collection	-	SE surface collection	sherd, 1 fruit pit
					burned wood sample, 28
					flat shards, 2 metal misc,
					18 nails, 1 fruit pit
	12/19/1		surface to 11.0 cm		(carbonized), 6 flakes,
33	3	-	bs	Pierstone 4	mortar?
	12/19/1				13 nails, 18 shards (15
34	3	_		Pierstone 5	flat, 3 conta), 1 coal
	12/19/1				, , , ,
35	3	_	surface to 4 cm bs	stone South of PS2	9 nails, 1 flat shard
	12/19/1	surface			3 shards (1 flat), 2
36	3	collection	_	SE surface collection	sherds
	12/19/1	surface			8 container shards, 1
37	3	collection	_	NE surface collection	sherd, 1 coal
	12/19/1	surface		NW surface	
38	3	collection	_	collection	1 container shard
	12/19/1	surface			
39	3	collection	_	SW surface collection	4 shards (3 flat)
		surface		2.1 Sarrace concention	1 container shard
40	1/9/14	collection	_	SW surface collection	(brown)
-10	1/ // 17	Concention		5 11 Surface concetton	6 coal, 2 sherds, 11
		surface			shards (6 flat), 1 broken
41	1/9/14	collection	_	SE surface collection	tool tip
71	1/ 7/ 14	surface	-	SE SUITACE COHECHOII	28 shards (5 flat), 9 coal,
42	1/9/14	collection		NE surface collection	1 sherd, 2 flakes, 3 nails
44	1/7/14	COHECTION	-	TVE SUITACE COHECHOIL	
					12 shards (4 flat), 13
		aumfo a -		NW cumfo o a	nails, 2 flakes, 1 metal
12	1 /0 /1 4	surface		NW surface	misc, 1 milk glass
43	1/9/14	collection	-	collection	canning jar lid liner frag
		C			7 shards (5 flat), 1 milk
,,	1 /0 /1 1	surface		SE of ps5 surface	glass canning jar lid
44	1/9/14	collection	-	collection	liner frag

					6 sherds, 1 milk glass
					canning jar lid liner frag,
					5 flakes, 3 slate?, 4 coal,
					40 nails and frags, 29
			surface to 21.0		container shards, 9 flat
45	1/14/14	-	cmbs	N or SP2	shards
					14 nails/frags, 1 button,
					1 curved shard, 1 bone
					frag, 3 burned wood, 2
46	1/14/14	_	clean up	around PS1	chalk pebbles
		surface	•		1 nail, 2 coal, 5 sherds, 3
47	1/14/14	collection	-	SE surface collection	flat shards
					2 nails, 2 sherds, 1 milk
					glass canning jar lid
					liner frag, 7 container
		surface		NW surface	shards, 1 décor shard, 1
48	1/14/14	collection	-	collection	flat shard, 1 misc shard
					5 sherds, 1 flake, 1
					bottle neck frag, 4 shoe
		surface			frags, 7 container shards,
49	1/14/14	collection	-	NE surface collection	3 flat shards, 2 nails
					3 sherds, 18 shards (10
					flat), 1 milk glass
					canning jar lid liner frag,
					3 flakes, 3 coal, 1 prehis
					sherd, 1 metal file misc,
					1 metal misc, 52 nails
50	1/20/14	-	surface to cmbs	around PS7	and frags
					1 button, 9 sherds, 1
					prehis sherd, 11 coal, 2
					shoe frag, 1 metal misc,
					5 flakes, 34 nail and
			surface to 4.5/5		frags, 75 curved shards,
51	1/20/14	-	cmbs	around PS9	13 flat shards

APPENDIX D: ARCHAEOLOGY FORMULAS AND MODELS USED

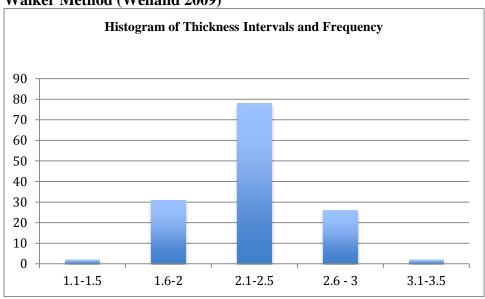
Moir Method (Moir 1987)

84.22 x (thickness) + 1712.2 ± 5 years		
M= 2.27 mm		
84.22 (2.27) + 1712.2		
Date = 1904		
±5 years: (1899-1909)		

Ball Method (Weiland 2009)

Dun Memor (Wenting 2005)
Date = $(Mean - 1.00 \text{ mm} / 0.0286) + 1800$
Date = $[(2.27 - 1.00)/0.0286] + 1800$
Date = $(1.27/0.0286) + 1800$
Date = 44.4 + 1800
Date = 1844

Walker Method (Weiland 2009)



Walker Dating Scale, from Weiland (2009)

Dating Scale	2/64 in. (0.794 mm)	Sites occupied by 1820 and no longer occupied by 1840
	3/64 in. (1.191 mm)	Sites built or occupied prior to 1845
	4/64 in. (1.587 mm) or greater	Sites dating after 1845
	6/64 in. (2.381 mm)	Thickness exceeds historic context
	8/64 in. (3.175 mm) or greater	Modern glass thickness

Mean Ceramic Date

	Number of		
Type	Sherds	Date	
Whiteware - Plain	36	1870	67320
Whiteware - Shell Edged	2	1840	3680
Whiteware - Embossed	3	1880	5640
Porcelain - Plain	3	-	1
Porcelain - Decorated	1	-	1
Ironstone - Plain	7	1870	13090
Ironstone - Décor Red	1	1870	1870
Course EW - Albany	3	1890	5670
Creamware - Plain	1	1796	1796
Whiteware - Blue Glaze	1	1850	1850
Whiteware - Blue	1	1845	1845
Pearlware	3	1805	5415
CE - Plain	1	-	-
			Mean Date:
	63		1897.82456
			1897 ± 10
			years
			1887 to 1907

South Model of Historic Site Groups based on Artifactual Remains (South 1977).

- I. Kitchen Group
 - a. Ceramics
 - i. Over 100 types
 - b. Wine Bottle
 - i. Several types
 - c. Case Bottle
 - i. Several types
 - d. Tumbler
 - i. Plain
 - ii. Engraved
 - iii. Enameled
 - e. Pharmaceutical type bottle
 - i. Several types
 - f. Glassware
 - i. Stemmed
 - ii. Decanter
 - iii. Dishes
 - iv. Misc.
 - g. Tableware
 - i. Cutlery
 - ii. Knives
 - iii. Forks
 - iv. Spoons
 - h. Kitchenware
 - i. Pots
 - ii. Pans
 - iii. Pothooks
 - iv. Gridiron
 - v. Trivets
 - vi. Metal teapots
 - vii. Water kettles
 - viii. Coffee pots
 - ix. Buckets
 - x. Handles
 - xi. Etc.
- II. Bone Group
 - a. Bone fragments
- III. Architectural Group
 - a. Window glass
 - b. Nails
 - i. Wrought
 - ii. Cut

- iii. Wire
- iv. Other
- c. Spikes
- d. Construction hardware
 - i. Hinges
 - ii. Shutter hooks
 - iii. staples
 - iv. Fireplace backing plates
 - v. Lead window cames
 - vi. Etc.
- e. Door lock parts
 - i. Doorknobs
 - ii. Case lock parts
 - iii. Keyhole escutcheons
 - iv. Locking bolts and brackets
- IV. Furniture Group
 - a. Furniture hardware
 - i. Hinges
 - ii. Knobs
 - iii. Drawer pulls and knobs
 - iv. Escutcheon plates
 - v. Handles
 - vi. Rollers
 - vii. Brass tacks
 - viii. Etc.
- V. Arms Group
 - a. Musket balls, shot, sprue
 - b. Gunflints, gun spalls
 - c. Gun parts, bullet molds
- VI. Clothing Group
 - a. Buckles
 - i. Many types; shoe, pants, belt
 - b. Thimbles
 - c. Buttons
 - i. Many types
 - d. Scissors
 - e. Straight pins

- f. Hook and eye fasteners
- g. Bale seals
- h. Glass beads
 - i. Many types

VII. Personal Group

- a. Coins
- b. Keys
- c. Personal items
 - i. Wig curlers
 - ii. Bone brushes
 - iii. Mirrors
 - iv. Rings
 - v. Signet sets
 - vi. Watch fobs
 - vii. Watch keys
 - viii. Slate pencils
 - ix. Spectacle lens
 - x. Tweezers
 - xi. Other

"personables"

VIII. Tobacco Pipe Group

- a. Tobacco pipes
 - i. Many types
- IX. Activities Group
 - a. Construction tools
 - i. Plane bit
 - ii. Files
 - iii. Augers
 - iv. Gimlets
 - v. Axes
 - vi. Hammers
 - vii. Saws
 - viii. Chisels
 - b. Farm tools
 - i. hoes
 - ii. rake
 - iii. shovel
 - iv. sickle
 - v. etc.
 - c. Toys
 - i. marbles
 - ii. doll parts

d. Fishing gear

- i. fishhooks
- ii. sinkers
- iii. gigs
- iv. harpoons
- e. Stub-stemmed pipes
- f. Colono-Indian pottery
- g. Storage items
 - i. Barrel

bands/staves

- ii. Brass cock
- h. Ethnobotanical
- i. Stable and Barn
 - i. Horseshoes
 - ii. Stirrup
 - iii. Bit
 - iv. Wagon and buggy parts
 - v. Etc.
- j. Miscellaneous Hardware
 - i. Bolts
 - ii. Nuts
 - iii. Washers
 - iv. Etc.
- k. Other
 - i. Button

manufacturing

blanks

ii. Kiln waster

furniture

iii. Blacksmithing

debris

iv. Other material

reflecting

specialized

activities

1. Military Objects

- i. Swords
- ii. Artillery shot and

shell

iii. Insignia

iv. Etc.

McBride-McBride Model of Historic Site Function Based on Artifactual Remains (McBride and McBride 1990).

Site Function	Predicted Remains
I. Dwelling and Providing Shelter	House structures Outbuildings (slave quarters, kitchen, springhouse, privy) Cisterns or wells Structural remains (posts, joints, chinking, window glass) Architectural hardware (nails, door hinges) Post molds Fences Trash dumps Wood, coal, coal cinder, other fuels
II. Food Preparation, Storage and/or Consumption	Outbuildings (kitchen, smokehouse, bake house, root cellar) Hearths and storage pits Food remains Domestic meal wares (silver ware, serving ware) Ceramics Crockery Table ware Table glass Canning jars Butchering implements
III. Farming and Stockbreeding	Outbuildings (barn, silo, granary, slaughterhouse, hen house) Farm equipment and tools (plow, rake, hoe, shovel, ax) Pens Fences Cisterns and wells Horse shoes, harness, and other tack Domesticated plant remains Domesticated animal remains

TV C1 (1' T) 134 C	T 1 ' ' 1 1
IV. Clothing Use and Manufacture	Looms and spinning wheels
	Spindles
	Shuttles
	Needles
	Buttons, zippers, buckles, eyelets
	Textiles
	Thread, yarn, and cordage
	Plant fibers
	Animal fibers and wool
	Animal hides and leather
	Ammar maes and readier
V. Armed Conflict	Forts, stations, garrisons
	Stockades and bastions
	Encampment and battlefields
	Gun, gun parts, gun flint
	Ammunition (cannon balls, musket balls,
	slugs, shells)
	Sword, dagger, knife
	Bow and arrow, quiver
	Mace, tomahawk, club
	Human remains with sharp-force or blunt-force
	-
	trauma
VI. Hunting and Trapping	Bow and arrow, quiver
	Gun, gun parts, gun flint
	Ammunition (musket balls, slugs, shells)
	Knives
	Snares and Traps
	Wild animal remains
	wild allillal femalis
VII. Medical Treatment and Medical	Bottle glass (pharmaceutical bottles)
Care	Medicines and medicinal plants
	Surgical tools
	Bandages
VIII. Personal Status Maintenance	Public construction
and Social Activity	Burials
,	Grave goods
	Pipes
	Tobacco
	Personal ornaments, jewelry
	Coins, paper money
	Personal effects
T .	i cisonal circus

IX. Entertainment	Musical instruments Marbles Cards Toys, dolls Game pieces, dice Writing supplies (paper, pens, quills, ink)
X. Lumbering	Axes, adzes, saws Harnesses and other tack
XI. Milling	Mill structures (saw mill, grist mill, flour mill, lumber mill) Mill wheels, mill stones Grains Lumber Saws
XII. Mining and Related Resource Procurement	Picks, axes Shovels Boxcars and rails Rigs and platforms Drill bits Niter, coal, minerals Oil drums
XIII. Manufacturing	Manufacturing plants Railroads Roads Industrial equipment Finished goods (glass, ceramics, sheet metal) Raw materials (metal, glass, clay, sand)
XIV. Moonshining	Stills Hearths Copper tubing Bottle glass Canning jars Corn, barley, and other plant remains Wood charcoal