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THE GRAVELY HOUSE: A Case Study in Twentieth Century Archaeology and Material Culture

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THE GRAVELY HOUSE:

A Case Study in Twentieth Century Archaeology and Material Culture

Jessica Clark

Senior Honors Research Thesis

Department of Sociology, Anthropology, and Criminal Justice Studies

Longwood University

Dr. James W. Jordan, Faculty Sponsor

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Introduction

Material culture is the domain of the archaeologist. Like any science, the methods used and the answers sought in archaeology have changed, and continue to change, constantly adapting to the world in which they operate. Every century has its own legacy to be uncovered. The twentieth and twenty-first centuries are no exception to this, but their archaeological resources are only just beginning to be investigated. Through this research I sought to examine and represent the home of the Gravely family as a case study in archaeology of the early twentieth century. I first studied the historical record of the family through deeds, newspaper articles, and family records that have been maintained at the Library of Virginia. I then compared this data with the physical remains of the structure that were excavated after the demolition of the home in 2005. Only a few hundred artifacts were uncovered on the site despite a century of occupation.

It is my thought that modern attitudes toward disposability will only increase the frequency of this type of occurrence. Emphasis is presently placed on expediently removing waste from peoples' lives. Because of this, context as traditionally approached by archaeologists, is being destroyed. New construction and developments are being established, taking the place of twentieth century structures, and the information they had to offer is potentially lost. In the twentieth century, the technological advances made in America were enormous; the century began with homes still heated by coal and individuals who spent their lives working in factories. By the close of the century, many homes had personal computers and the job market had transitioned to office jobs with little emphasis on skilled labor. Such dramatic economic and cultural change warrants documentation. The stories of the people of twentieth century America deserve to be told and it has been my intention that this research argues that case.

I believe that the Gravely House represents the fate that will befall structures of the twentieth century with increasing frequency in the future. The archaeological value of such structures is questioned due to their recent use, but also because they are documented historically to varying degrees. Demolition is also problematic because of the shift in context that results from it. Once a building is destroyed, its contents are severely fragmented and their relation to each other in the ground is unrelated to the positions they occupied in the structure. Through historic preservation, I believe that these structures can be maintained as they are to supplement the historic record and archaeology will not be necessary. In instances of rapid demolition, however, any salvage archaeology that is allowed to happen will likely require a different approach from traditional archaeology, including, but not limited to, working with historic documents, interviewing local people, and considering outlying contexts such as landfills or material culture distributed through yard sales, and other dispersal processes.

Significance of Material Culture

Archaeology and Material Culture

As a discipline, archaeology seeks to uncover material culture: the things that have been created or modified by people. Through these artifacts, information about the lives of earlier people is revealed. Heritage is defined in terms of items that are passed on from one generation to the next, emphasizing its physical nature; following in this vein, artifacts of a culture are often perceived as the things that remain from the distant past rather than the things from the most recent decades. The value of a site is generally related to the value of the material items that remain to be found there (Pétursdóttir 34). “Of prime importance to archaeological concerns is the *product*, which possesses inherent physical characteristics, such as appearance, size, color,

and taste” (Henry 6). From observations of these characteristics, archaeologists are able to infer things about a given culture. “...[M]aterial culture...is the set of most culturally sensitive data available” (Deetz 10). It serves the same role that an informant would in a participant-observation field study, but the material culture sits passively and forces the researchers to make what observations they will.

There are various ways in which items come to reside in the archaeological record; sometimes it is after the object’s primary use, while other times the object has been recycled, repurposed, and passed along, giving it a unique context. Once an individual or group acquires an object and uses it, then it is either chosen to be used again, lost, or deemed unable to be reused. If the item is to be used again, then it can remain within its original household or be passed on to another group, where it can either continue to serve its original purpose or it can be reinvented and used in a new way. If the item is lost, by default it ends up in the archaeological record despite the intentions of its owner. When the item was meant to be discarded, it likely will end up in the record with other things that were intentionally thrown away (Henry 5). Artifacts have much to tell about the context in which they are found, and it is possible that the items had been repurposed and were originally from an earlier and different context.

Transitions in material culture can be viewed as independent occurrences, but a simple change in one place can set in motion a ripple effect that influences material culture dramatically; in this way the social and economic periods of a given culture can be traced through the presence or absence of certain materials. Consider the invention of the light bulb. It is often presented in history as an isolated invention, but the creation of this one piece of technology completely transformed the material culture of the nation (and the world). With the invention of the light bulb came the need to harness electricity, lay cables across the entire

country, place transformers in neighborhoods, and create new light fixtures for households and businesses everywhere. Then plants to manufacture the products were needed and consumers had to keep up with the newest wattage and safety features, and eventually there was a transition to modern bulbs, such as compact fluorescent lamp light bulbs. Looking forward from that one artifact, so much of the human way of life was altered and the material culture irrevocably changed (Shanks 31).

Through the continual invention of new material objects in America, people began to wrap themselves up in the idea of a materialistic culture. The things being created were in constant need of maintenance and improvement, catching humans in a constant cycle of things (Hodder 161). Material objects are also significant because people ascribe meaning to them that make each thing important to its time. Things can be significant one day and irrelevant the next, allowing archaeologists to trace the usage periods of various artifact types (Martin 141). “Much ...earlier scholarship concerned describing (what is it?), identifying (who made it?), dating (how old is it?), and judging (is this as good as that?)” (Martin, 145). “...[B]ecause of that crucial refinement of analytical tools, sophisticated studies of the relationships among objects, makers, buyers, and users in their historical and cultural context now are possible” (Martin, 145). Items such as soda and beer can tabs have changed periodically through history, but each different type was used only for a set period of time, which allows archaeologists to know the approximate manufacture date of these items when they are discovered. Typologies such as this have been created for artifacts ranging from prehistoric trade beads to historic maker’s marks on glass bottles, and through these compilations of data, continuity and deviation can be documented among sites.

The things that people purchase for their daily lives serve a dual purpose: fulfilling the physical needs of the group, as well as sending a message regarding socio-economic standing (Henry 6). By looking into the material culture of the home, much can be learned about a primary role that women have served throughout most of documented history in America: buying and/or making the items for the home. Socio-economic status is generally based on the home, but the appearance of homes are often a reflection of the desires of the women who run them, even though they were often not contributors to the socio-economic standing of the family because they did not have “careers” or incomes (Martin 142).

“Yet an artifact’s primary limitation is that it is no longer a functioning element of a world-in-action once it enters the traditional...archaeological record” (Yentsch 16). It could also be considered, however, that once discovered and documented in, or removed from, the matrix an artifact takes on a new life; it has been repurposed. From this point it can be placed back into the soil, or taken to a lab for processing and curation, making it both of the historic period and of the present (Shanks 17).

Social and Personal Life and Material Culture

Material objects possess a certain meaning ascribed to them by the individual or group who used them within their own time periods, however these meanings are not universal and shift from one era to the next (Cook, Yamin, and McCarthy 54). Artifacts that are uncovered can be a part of a range of products, each of which have both moral and social connotations that contribute to the story of the person, or people, who used them (Beaudry, Cook, and Mrozowski 286). The approximate values of historic ceramics, for example, have been recorded, and from plate fragments at a home site, the amount of money the family was willing and able to spend on this aspect of their lives can be inferred.

The artifacts generally reveal the position that an individual or group has within their society, including socio-economic status, and even indicating things as specific as the occupation of the residents (Bragdon 83). Interestingly, however, sometimes the wealth of individuals is reflected in their landholdings and may not become as clear simply through the artifacts from the occupation site, but rather the combination of artifacts with historical records is required (Bragdon 86). The concept of “socio-economic” status, a marker that researchers often seek to determine about a site, was not used to describe groups until the 1970s. This term also implies that social status and economic status are completely interchangeable, which is not always the case; farmers could have significant landholdings, thus large economic assets, but are not seen socially as “high-status” because of their occupation (Cook, Yamin, and McCarthy 51).

During the late nineteenth and early twentieth centuries the working class viewed the home as a place in which they could escape the demands of their work. The upper and middle classes, however, were using their homes as hubs for business and social gatherings, increasing the amount and variety of material items that might need to be in their home for these various occurrences (Cohen 764).

As the demographics of the individuals living within a house change, the types of things that they are buying change, thus resulting in differing material cultures left in the archaeological record. Take for example the Gravely House, which will be discussed in further detail to follow. It was the home of the rich and successful young family of Will and Caroline Gravely, who owned the structure in the early twentieth century. It was different from that of their daughter, Nina Gravely, who maintained the family home until 1980, but each of their unique occupational periods could potentially be reflected in the archaeological record (Henry 7). By looking at the objects left behind by a specific household, cultural change among the inhabitants can often be

observed, sometimes running parallel to cultural changes happening in society at large (Martin 146). The things from a home create an image of the people who lived there. To some degree their beliefs and practices are revealed, and while this group is but a snapshot of their larger culture, at least some of their behaviors and possessions would have been a direct reflection of the culture in which they participated (Henry 7).

Artifact remnants are not the only component in telling the story of the past. In some instances the house itself is still standing and it plays its own part in explaining the people who lived there. “Information about the house is not the primary message conveyed, but rather a set of ideas and ideals about family and society, and once the real house is transmuted into a symbol of ideal family it inhabits imaginary space just as thoroughly as it does physical space” (Yentsch 6-7). “...[H]ouses are cultural, that they are profoundly matters of social order. Since social order cannot be disjoined from economic aspiration and ideas of the sacred, then houses cannot be understood outside of their economic, political, and religious contexts, outside of their reality as cultural creations” (Glassie 57). In urban areas, the items in an artifact concentration are often the result of some rapid occurrence; something significant happens that results in the destruction of a building or causes an entire family to move, leaving a deposit in the archaeological record (Beaudry, Cook, and Mrozowski 284).

The use of a site leads to the acquisition of material culture, but then the issue arises as to how an individual or group will manage disposing of unwanted items. What becomes of modern material culture once individuals are done with it? “In the general economy of the household or the person, shedding off possessions can be as complex a process as acquiring them...” (Lucas, “Disposability and Dispossession” 17). The social implications of a material life continued to grow through the nineteenth and twentieth centuries and this growth paralleled the increase in

manufacturing and advertisements that lead to creating the mass-consumer idealism that contributes to the material culture of today.

The Rise of Consumerism

Before the twentieth century homes, neighborhoods, and communities, functioned as closed systems, creating what they needed and reusing existing items to stretch their longevity for as long as possible (Strasser 14-15). “Industrialization broke the cycle. In an industrial system, the flow is one-way: materials and energy are extracted from the earth and converted by labor and capital into industrial products and byproducts, which are sold, and into waste, which is returned to the ecosystem but does not nourish it” (Strasser 14-15). In the one-way system, these items have to end up somewhere, but ultimately it creates a different kind of waste deposit than the traditional, contextual archaeological site that might come to mind.

During the late nineteenth century, the transition of mainstream American culture from farming and small communities to large-scale industrialism is reflected in the homes and furnishings used in them during that time period (Cohen 753). But by the turn of the twentieth century industrialism had come into full-swing in America, and production amounts tripled from the late nineteenth century to 1927 (Strasser 170). Synchronously with this increase in production came an increased awareness of personal hygiene and medical sanitation; this meant more medical waste as well as more products designed for cleaning spaces and people, as well as containers and systems to remove this waste from the living area, rather than simply dumping it outside the home as had been the norm for most of human history and prehistory (Lucas, “Disposability and Dispossession” 9-12).

The mass production and distribution of products created significant changes in the lives of consumers, namely by making them identifiable as consumers rather than people who sustained themselves (Cook, Yamin, and McCarthy 54). There are three characteristics that propelled this change: the fact that new products were being produced all the time, the transition to a cash economy rather than a reliance on a barter system, and extensive advertising and branding (Cook, Yamin, and McCarthy 54).

As consumers, people began to adopt things into their way of life even if they did not serve an instrumental purpose. The concept of a parlor within a home is a distinctive marker of the transition to industrialism and consumerism. The primary function of a parlor was to entertain; it was also used to keep non-family members separate from the everyday goings-on of the household. The parlor was a space in which to show off material superiority. "...[A] typical parlor overflowed with store-bought, mass-produced objects, carefully arranged by family members..." (Cohen 754). Along this vein, the parlor served as the family's façade to the rest of the world, allowing a significant opportunity for managing first impressions.

The increase in the use of department stores also provided impetus for the rise of consumerism. Shoppers were able to purchase a very wide range of products together in a single location, increasing convenience, as well as introducing individuals to exotic products from far-away places that they previously would not have considered a necessity (Martin 149). People shop for things not only to have to things, but to be seen in the shopping centers and to have their wealth known through objects without having to verbally express personal wealth (Cook, Yamin, and McCarthy 60). "...[N]early all consumption is intended to be conspicuous to someone" (Cook, Yamin, and McCarthy 60). Consumer behavior is that through which individuals are "searching for, [acquiring], using, evaluating, and disposing of products, services, and ideas

which they expect will satisfy their needs” (Henry 3). It is a scenario of using the material to transmit a message to others in a given time and place, often the same message that will also translate into the archaeological record in the future.

People become wrapped up in these material things “...because...[they] have invested labour, resources, time, in things; it occurs because we have come to depend on the positive benefits deriving from the greater flow of resources and information through the network; entrapment occurs because various forms of ownership of things may lead to rights and obligations towards each other” (Hodder 164).

Transition to Materialism and Disposability

By the nineteenth century people had begun to separate their waste products (food remnants versus paper products, etc.). Once the need to create these distinctions came about, an entire system for waste removal came into being, making another sphere, unique from that of the home and changing the path of the artifact on its way to the archaeological record (Lucas, “Disposability and Dispossession” 8). It has been documented that in the nineteenth century a large percentage of waste products were included in the ashes from household fires, since groups used whatever of their food and paper wastes that would burn to supplement the fuel supply. Throughout the twentieth century into today, however, ash makes up only a very small percentage of waste products (Lucas, “Disposability and Dispossession” 13). This transition from burning household items to sending waste items away means that there are more objects that could potentially remain for archaeologists to study.

People were in possession of ever-increasing amounts of things to throw away because packaging had become the way in which items were sold to the public. Even if the item

contained within the packaging could be reused, the wrappers and boxes were designed intentionally for disposal. This began with paper products and card stock, but has expanded and now includes cellophanes and plastics (Lucas, “Disposability and Dispossession” 12). “More people had more things, and less space for storage....New processes for making and filling cardboard cartons and tin cans, and new materials such as cellophane and aluminum foil, engendered a new class of household trash” (Strasser 13-14). In the nineteenth century it was common that the homemaker would simply dispose of food and other waste near the house, within the yard, and old dishwater might have been thrown from a basin out the window, but this is found with less frequency after the turn of the twentieth century (Strasser 7).

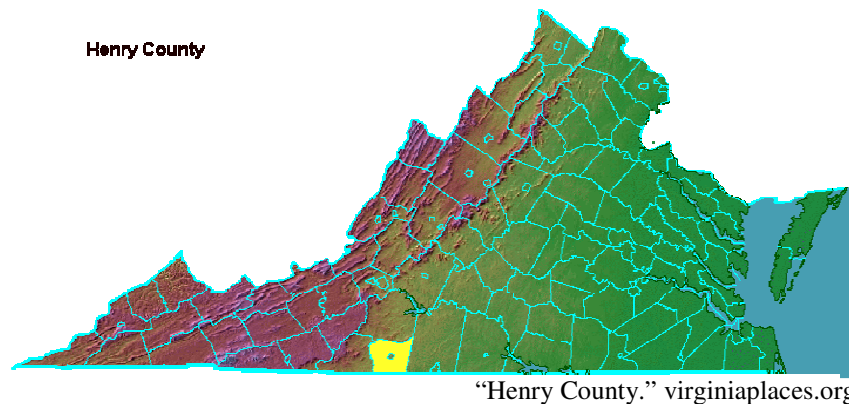
American culture after approximately 1900 had become based on disposability (Strasser 16). Through the transition to disposability, individuals’ ability to throw things away was a powerful social statement. Only those who had financial stability were able to indiscriminately throw items away without thought to repurposing anything (Strasser 9). New products are constantly being introduced and they are not intended to last for long periods of time or to be things that people can repurpose or fix if they break. Things are designed to be temporary, and even if they do not physically become unusable, they are generally made culturally obsolete by the next, newest thing (Strasser 16). “Before the twentieth century, technological obsolescence has been a concern of manufacturers faced with decisions about replacing workable production machinery with the latest innovations. By the 1920s, it was an ordinary concept in everyday life, familiar to people who had thrown away old kerosene lamps in favor of advanced models and then because they had electricity” (Strasser 191). Ironically, the marketing of disposable material culture in itself produces a significant amount of waste. Items, even in their own small boxes are shipped in larger boxes; advertisements run in magazines, newspapers, and catalogs; and

brightly-colored paper and cardboard displays occupy stores for only a brief period of time before they become irrelevant (Strasser 171).

Not only did an emphasis on acquiring material things rise as the cultural norm in America, but also an emphasis on recording these material things—the material wealth of individuals is recorded in a tangible and conspicuous way. Receipts of purchase, deeds books tracing the possession of all houses and properties in an area, and last will and testaments, among other sources, all remain as a part of the material culture themselves. An examination of both the historic record and the archaeological record can serve to create a more holistic picture of the occupation of a site.

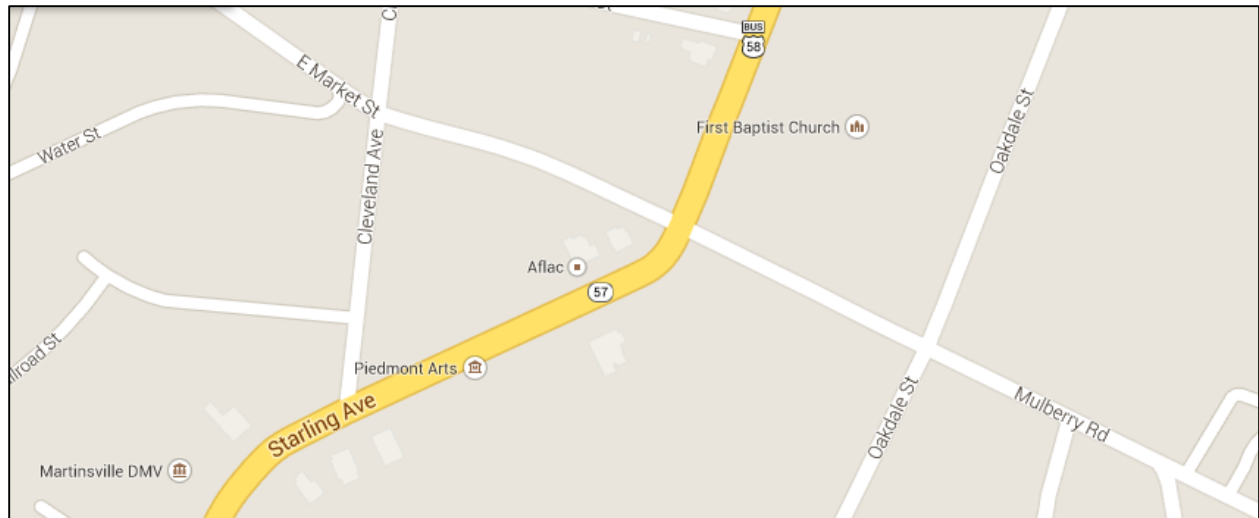
An Historical Overview of the Gravely Family

Henry County, Virginia is named for Patrick Henry, the famous Revolutionary War orator. He briefly made his home along Leatherwood Creek near the community of Ridgeway, southeast of Martinsville (Pedigo and Pedigo preface; “Henry County, VA Leatherwood”). Another Revolutionary War figure, Joseph Gravely, made his home in the same area when he moved to Henry County from Culpepper, Virginia just shortly before the war began. He established himself, along with his wife and ten children, who would go on to make their own marks on the development of the county (Pedigo and Pedigo 137). From this first generation came subsequent Gravelys whose influence can still be seen in the area.



George D. Gravely, a grandson of Joseph Gravely, became a lawyer in Henry County and served as the county clerk for two terms. His son George L. Gravely also served the Martinsville community as a lawyer. This research focuses on the home that was owned by William H. Gravely, George L. Gravely’s son, who was also a local lawyer; his construction of the home began after his acquisition of a portion of the property in 1906. He carried on the Gravely legacy as mayor and Commonwealth’s Attorney for the city of Martinsville. In 1899 he was elected to the Virginia General Assembly and served three terms in the House of Delegates (Anson-

Greene-Gravely Family Papers; *Architectural Survey of Henry County—Martinsville, Virginia* 32; Hall). William married Caroline Anson, the daughter of a local minister, and they had two children: William and Georgina. Together they lived on the block between Starling Avenue, Mulberry Road, and Oakdale Street in the city of Martinsville, located centrally in Henry County.



“Starling Ave.” google.com/maps

William and Carrie worked with an architect to have the home constructed to their own specifications (Anson-Greene-Gravely Family Papers). This, along with the style of the home and the features they included, indicate their economic success and high status in the community.

Historical Record of the Gravely House

The home of William H. and Caroline Gravely was located on the block where the First Baptist Church of Martinsville stands today. As indicated in their personal correspondence, the couple had the house built to their specifications rather than purchasing one already built. William sent his ideas and plans for the house to an architect in Roanoke, Virginia. The architect, H. H. Huggins, is known for designing Fishburn Mansion near Roanoke, which is listed on the

National Register of Historic Places (City of Roanoke). In response to correspondence from William, Huggins wrote the following:

Dear Sir,

I received your favor duly but was just leaving town on a business trip which prevented my answering sooner.

I will state that just at the time of preparing your drawings I was over run [sic] with work and consequently could not keep every detail under my thumb.

Replying to your letter by paragraph numbers.

- 1. We invariably use 9" brick walls for a house of this character here in Roanoke, and experience has shown it abundantly strong and durable [sic].*
- 2. Concerning dining room door, I have forwarded new prints showing changes desired. Please destroy old prints.*
- 3. The tin specified will last 30 years if kept properly painted, and I would not advise a higher grade in this class of house.*
- 4. If you can secure thoroughly air dried siding, good; kiln dried better than unseasoned. I fear you cannot find the thoroughly air dried stock.*
- 5. The two coats of paint is probably [an] undetected typographical error. I do not advise two coats.*
- 6. Attached sheet changes frosted to plate glass.*
- 7. The specifications as to sizes of timbers are correct. Sills should be 4"x6". Girders 6"x8" (turned edge ways) I have worked these two sizes together in hundreds of houses and they are all right. Top of sill and girder are to set on the same level. Ceiling [joists] should be 2"x6" in as much as you are not going to use attic. (End page 1)*
(Begin page 2) Contractor need not confine himself to 1"x3" sheathing. There are no other discrepancies [sic] as to sizes of timbers.
- 9. Rat proofing specified on sheet herein, in duplicate, calling attention to changes in plans and specifications [sic] which can be attached to originals. Extra. I do not understand your reference to change in stairway as there was no explanation given.*

Yours truly,

H.H. Huggins

(Image of letter on following two pages).

Images removed for publication in repository. To see image, contact Library of Virginia in Richmond Virginia or visit Greenwood Library to see print thesis.

Images removed for publication in repository. To see image, contact Library of Virginia in Richmond Virginia or visit Greenwood Library to see print thesis.

Anson-Greene-Gravelly Family Papers

Although the architect does not define the specific location each material will take in the house (the initial correspondence from W.H. Gravelly to Huggins was not found), the purpose for each item listed follows logically as building material in the historic context of the home. Metal mining increased in America around the turn of the 20th century, and resources, such as tin, began to serve a variety of purposes. Most commonly, tin was used to reinforce steel in cans, but it also was used as a coating to prevent rusting and corrosion (Gordon, Bertram, and Graedel). Tin alone, however, requires exterior paint in order to prevent rust, which reduces its value as an architectural material, but Huggins emphasized that by carefully maintaining the paint, the tin would be more than sufficient for the Gravellys' purposes (Geerlings 165).

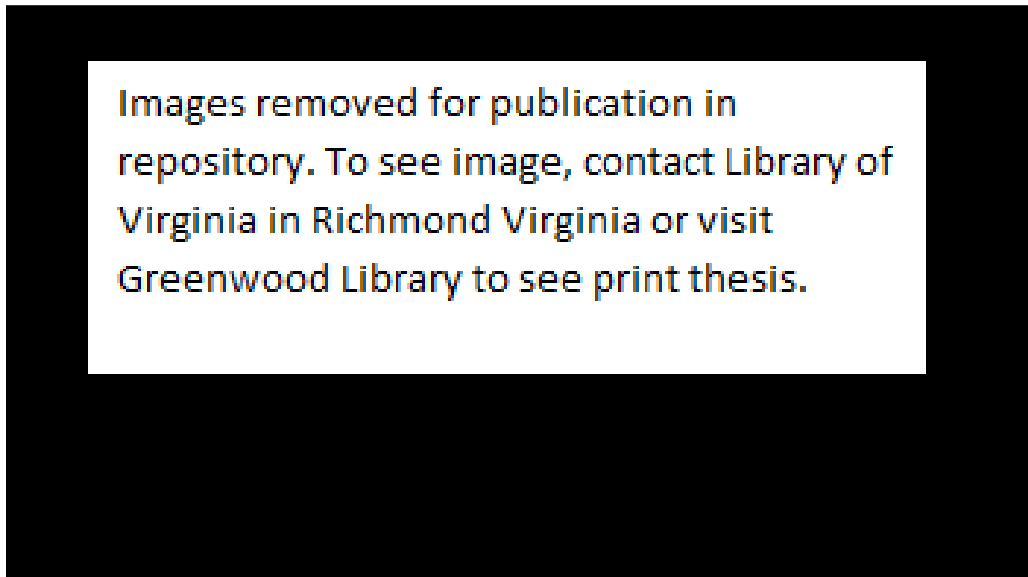
If wood being used as a structural material is put into place before drying properly, moisture content in the wood, combined with moisture content (or lack thereof) in the air, can cause the wood to shrink and warp as it dries, if it is put into place before being allowed to dry properly. Air dried lumber is not as substantial as kiln dried in which extra heat is used to ensure

moisture removal. Air drying is most commonly applied to materials that will be used outdoors (in siding, porch floors, etc.) because they will be exposed to dramatic changes in moisture and temperature levels. Kiln-dried wood alternatively is used for interior purposes (hardwood floors, stairs, wall paneling) because the reduced moisture levels are better able to function in the controlled temperature and humidity levels that occur inside; they do not need to be as adaptable as wood for outdoor use (USDA).

The manufacturing process for window glass requires that the product be ground and polished; grinding it down is the first step in the process of creating transparency, but its primary purpose is to make the glass the desired thickness and ensure that the entire surface is flat (Harboe, 35). At this stage, the glass is still translucent and may be referred to as frosted glass. The polishing process finalizes the glass into a more desired product for use in windows. Plate glass would have been the modern option for use in the Gravely house because the methods by which it was manufactured resulted in the most transparent glass to date for windows. Rather than pulling the sheets of glass, late nineteenth and early twentieth century glass manufacturers poured molten glass into molds, which reduced distortion in the finished panes (Harboe 34-35).

Sills and girders are integral components of a structure, so it follows that William was questioning the size and strength of these elements, and that Huggins felt the need to justify himself: “I have worked these two sizes together in hundreds of houses and they are all right” (Anson-Greene-Gravely Family Papers). The sill sits directly on the foundation of the home, whether stone, brick, concrete, or a combination, and the girders are the supports that connect the sills to the structure above (M.R. Miller and R. Miller 117-118). The architect also implies that the attic is not to serve as a primary living space in the home, and perhaps this is the reason that there is no attached floorplan for that section of the structure. The architect provided William and

Caroline with a sketch of the floor plan of the ground level of their home with estimated dimensions for each room, the porch, fireplaces, and the number and size of windows.



This is known as the ground plan of the home, designed to show the shape of the exterior walls of the house (McAlester and McAlester 21). It marks the location of closets, windows, doors, and fireplaces in the rooms. The plan also indicates a porch wrapping around two sides of the front of the house and a smaller porch on the back of the house, off the kitchen. The measurements of the rooms, windows, and doors are listed and their shapes, sizes, and locations serve to provide more information about the characteristics of the home.

Parlor, measuring 18' by 15' 1/2"

1 window 6'6" by 2'6", 1 window 6'6" by 2'9", 2 windows 6'6" by 2'

Dining room, measuring 14'3" by 13'3"

2 windows 3'9" by 2'8"

Main hall, measuring 25'6" by 9'6"

2 windows 6' by 2'6"

Anson-Greene-Gravely Family Papers

Bedroom, measuring 15' by 17'

2 windows 6'6" by 2'

Kitchen, measuring 12'3" by 13'3"

3 windows, 5' 7" by 2'8"

There were only descriptions of the upstairs spaces as they are not a part of the ground plan.

Upstairs hallway

1 window 6' by 2'7"

Room above the parlor, measuring 18' by 15'

4 windows

Room above the bedroom, measuring 15' by 17'

2 windows

Room upstairs, measuring 8' by 10'

1 window

From this information it is apparent that the home was to include 21 windows. A high number of windows increase the amount of natural light that enters a structure, presumably reducing the amount of other light sources that would be necessary. However, simultaneously an abundance of windows create additional channels for heat and cold to travel into or out of the home; this ultimately means that more energy must be used to maintain heating and cooling, as well as special care to ensure that each window is properly sealed. On the ground floor, 15 doors were planned, which connected individual rooms to each other, as well as to the central hallways of the home. The fireplaces, and accompanying chimney, were located on the wall between the parlor and bedroom. Toward the end of the nineteenth century, central furnaces were becoming more common in structures, taking the place of earlier fireplaces and stoves. Because the single furnace could heat the home, rather than multiple fireplaces being required, there was an increased opportunity for diverse architectural styles with irregular shapes (including Queen Anne style homes). The shape of the home was no longer required to accommodate chimneys out of necessity; instead, chimneys were used as an architectural element and fireplaces began to serve more as a design feature than as the primary source of heat for the rooms (McAlester and

McAlester 28). Additional planning was required to work a chimney into the interior of a structure rather than having it attached as an external feature of the home.

Taking the dimensions presented by the architect, the footprint of the home would be between 950 and 1000 square feet, with additional footage added with the second story. These elements together are known as elevation, which is the shape made from the walls, roof, and non-structural details when the house is viewed, from the front or side, at ground level; this is defined distinctly from the ground plan mentioned above (McAlester and McAlester 21).

Receipts from the shipping of building and furnishing supplies were also preserved as records. An order shipped on the Danville and Western Railroad from Richmond, Virginia to Martinsville on May 13, 1903 listed the following items:

1 desk, 1 book case, 1 bundle B. Ends (possibly book ends), 1 stand, 1 pound of rail slats, 1 box of glass, 1 wardrobe, 1 mattress, 3 rockers, 4 chairs, 3 tables, rock (presumably for outdoor use)

Images removed for publication in repository. To see image, contact Library of Virginia in Richmond Virginia or visit Greenwood Library to see print thesis.

Anson-Greene-Gravely Family Papers

Additionally, a receipt from Danville and Western, shipping from Richmond to Martinsville on May 15, 1903, included:

1 bundle of rugs, 1 bundle of curtains, 1 bundle of poles

Images removed for publication in repository. To see image, contact Library of Virginia in Richmond Virginia or visit Greenwood Library to see print thesis.

Another receipt from the Danville and Western Railroad, Anson-Greene-Gravelly Family Papers

Martinsville on May 16, 1903, listed:

2 boxes of earthenware, 1 cask of china

Images removed for publication in repository. To see image, contact Library of Virginia in Richmond Virginia or visit Greenwood Library to see print thesis.

Anson-Greene-Gravelly Family Papers

The records of the purchase of these items indicate that they were incorporated into the home, whether structurally or as interior furnishings. Although this is not a comprehensive material culture of the Gravelly home, it presents the types and quantities of items they had in

their possession. This abridged list indicates the types of items that would have been in the house during its original occupation in the early twentieth century. However, because the home was occupied for the entirety of the century, the material culture would have adapted with the changing decades, as well as the different dynamics of people who made their home there. The original architect drawing does not show the additions that were made to the structure: in 1935, two apartments were constructed on the rear of the house to provide living spaces for Caroline's sisters, Jane and Ethel Anson (Hall).

Ownership of the Gravely House and Property

The property that would eventually hold the Gravely House was first owned by Frank W. Thomas, Elizabeth C. Thomas, and Kate S. Thomas in 1906. In that year, half of the property was signed over to Mollie H. Gravely and Caroline Gravely, William's wife (Court Records, Deed Book 33: 445). In 1910, the remaining half of the land between Starling Avenue and Mulberry Street was signed over into the possession of Mollie and Caroline Gravely from the Thomas family (Court Records, Deed Book 34: 458). The Gravelys built the family home on this property and raised their children there.

Georgina "Nina" Gravely, the daughter of William and Caroline became the owner of the property and the home, maintaining this ownership until about 1980, when she transferred the property to the J. Burgess Frith Construction company. She placed the condition that she would be allowed to remain in the house until her death (Hall). After Georgina's passing in 2001, the house and property came under joint ownership by the construction company and the trustees from the First Baptist Church (Hall).

Comparative Architecture

Various forms of architecture were used in constructing residences in Henry County during time the Gravelys were building in the early twentieth century. Log construction did not cease, at least in the outer-lying rural communities, until the 1930s (*Architectural Survey of Henry County—Martinsville, Virginia* 41). I-houses, which characteristically included two stories, three bays across the front, and a center hallway, were a very common form of construction in Henry County and elsewhere in America around the turn of the twentieth century (*Architectural Survey of Henry County—Martinsville, Virginia* 41). The foundation of I-houses was made primarily of brick and the chimney(s) would be located on one or both ends of the structure, being external to the home rather than enclosed within the building (*Architectural Survey of Henry County—Martinsville, Virginia* 41).



Typical I-House design
“Lee House.” cmhpf.org

Based on the image created by the architect and the photographic record that remains, the Gravelly home was constructed having many characteristics of the Queen Anne style, a style more structurally elaborate than the I-house. The American Queen Anne movement took place

between 1880 and 1910. It was a part of the medieval tradition of American architecture, which combined formal Gothic styles with simpler domestic structures; in the US, most of this influence was drawn from England and France (McAlester and McAlester 5). This style rose in popularity toward the end of the nineteenth century and flourished with widespread railroad activity, allowing an increased variety of materials to be shipped across the country to those individuals who could afford it (*Architectural Survey of Henry County—Martinsville, Virginia* 42). The city of Martinsville was located in the service range of both the Norfolk and Southern Railroad and the Danville and Western Railroad, giving it more accessibility than other locations (“History”).



The Gravely House
Photos by: Desmond Kendrick “William Henry Gravely-Nina Gravely Home.”

The preceding photographs show the rear of the Gravely House as it looked in 2005, shortly before the demolition of the structure. While not all the architectural details are visible, an idea of the general style of the home can be obtained from these images. Characteristically, Queen Anne-type structures feature small details and embellishments that are not necessary for the structural integrity of the home, but rather provide aesthetic appeal while also serving as an indication of wealth. Although not very common in northern states, this style was popular in the

south and west (McAlester and McAlester 268). Only a decade into the twentieth century, the Queen Anne style had run its course, to be overtaken in popularity by Colonial Revival structures (McAlester and McAlester 268).



Queen Anne-style architecture



Queen Anne-style architecture

Many examples of the Queen Anne style are very elaborate, displaying nearly all the features, including towers, spindles, ornamented eaves, fishscale shingles, and intentionally non-rectangular shapes. The preceding two photographs show that simplified versions of the Queen Anne style can be found, and this is more aligned with the aesthetic appearance of the Gravelly House.

Queen Anne. Of Life and Houses Blog
Photo by Ken Baugely "Burford House"

About fifty percent of Queen Anne homes have spindles, which are the thin, cylindrical slats of wood positioned beneath the railing on a porch, or beneath the hand rail on a flight of stairs; despite their location, spindles often are not weight-bearing and are used only to add interest to the porch—larger posts at either end provide support for the railing (*Architectural Survey of Henry County—Martinsville, Virginia* 42; McAlester and McAlester 264). These are listed on the receipts as an element purchased by William for the home and there were two porches drawn into the plan for the structure.



Example of porch spindles on a Queen Anne
Photo by Elizabeth André "Queen Anne"

Porches also served to emphasize the ornamental aspect of the Queen Anne style, creating unique visual elements on the outside of the home beyond the basic wall and roof structure (McAlester and McAlester 266). The eaves on Queen Anne style homes have brackets, meaning that there are decorative supports beneath the eaves which fill the ninety degree angle of the eave (*Architectural Survey of Henry County—Martinsville, Virginia* 42). Many brackets are white or light-colored wooden pieces, carved ornamentally, and are utilized for their aesthetic value, not contributing to the structural support of the eaves.

Structurally, this style also includes features such as extended porches, an extended front room with a faceted wall featuring multiple (usually three) windows, and a centered chimney (*Architectural Survey of Henry County—Martinsville, Virginia* 42). Each of these features is visible on the architect's sketch of the Gravely home. The centered, rather than external, chimney is historically indicative of the shift away from the I-house concept. It also indicates a higher economic status because the chimney must be accounted for more carefully in the construction of the home. The home was constructed around the chimney rather than having it as an external feature. In the case of the Gravely family, the chimney had two fireplaces at its base and these had to be considered as the rooms were being designed.

Gravely House Demolition

In November 2005 the decision was made to bulldoze the Gravely House. The structure and the property associated with it had come into the possession of the First Baptist Church of Martinsville from Nina Gravely (Hall). A nearby structure on the property had been subject to arson and the Gravely home itself was in significant disrepair, requiring a minimum of \$250,000 to be restored. The situation was described in grim terms; “[t]here was no insulation in the house, the electrical wiring was dangerous and plumbing was so old and deteriorated that the ‘pipes would crumble in your hands...’” (Hall).

Hal Prillaman, a trustee of the First Baptist Church, played a role in the demolition decision and stated that “[s]ome items were removed and will be preserved for future generations¹.... Other materials, such as windows, doors, and fireplace tiles were sold to a salvage dealer. Once usable items were removed, a bulldozer demolished the building” (Hall). The First Baptist Church had plans to expand its facilities into the space originally occupied by the home, but before this occurred archaeological exploration was undertaken.

Gravely House Site Excavation

From the last week of October to early December 2011, Dr. Elizabeth Moore of the Virginia Museum of Natural History led the excavation of a series of shovel test pits and test units on the lot that the Gravely House had occupied, in order to uncover anything of archaeological significance that had been left behind after the demolition. The team of excavators was comprised primarily of a group of Piedmont Governor’s School students who were learning about the archaeological method as a part of their STEM coursework (Moore, “Field Notes”).

Twenty six shovel test pits and eleven test units made up the excavation. These were distributed across the lot at even intervals in order to uncover as much material culture as possible while also accurately representing the occupation and use of the site. As stated on the site forms, the soil found in the shovel test pits was consistent in color with the Virginia red clay commonly found in southwest Virginia, and some of the pits did not contain any artifacts. Each pit measured 1'x1' and they reached varying depths, with none exceeding 13" (Moore, "Field Notes"). The test units were excavated and information including soil color and consistency, artifacts found, and additional comments were recorded every 2 inches of depth. Again, the soil colors were consistent with that of Virginia red clay, with little variation in color, and the artifacts were scattered throughout the units (Moore, "Field Notes").

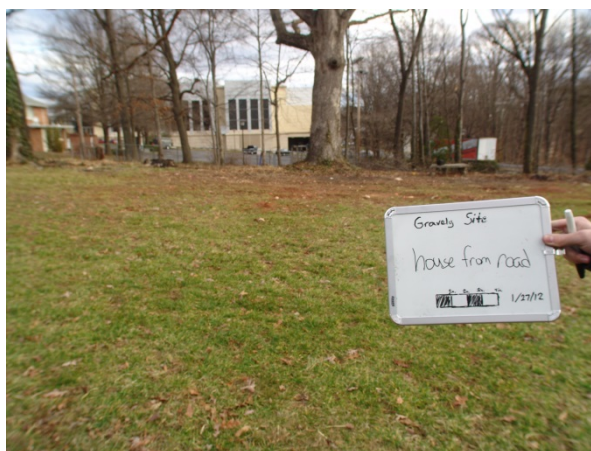
Gravelly House Excavation General Site Plan



Excavation Photos



A. North toward Starling Ave.



B. North east toward the Virginia Museum of Natural History



C.



D.



E. North east toward VMNH



F. South west toward Mulberry Rd.



G. North east toward VMNH



H. Concrete stepping stones



I. Concrete bench



J. Concrete decorative pond feature

Special Features on Site

Apart from the excavation units that were dug, three features were found that represent the domestic occupation of the site: remnants of stepping stones (presumably a walkway), an outdoor concrete bench, and a water feature that may have been a fish pond. Each of these can be seen in the photographs from the site (See photos H, I, and J on the preceding page). The stepping stones and bench serve to indicate that concrete remnants found in the excavation may not have been solely from structural concrete, as it can function in multiple capacities. The presence of a fish pond would reinforce the wealth of the family if it could be dated to the early decades of the home; this type of decorative outdoor feature served no immediate functional purpose, was an unnecessary expense, and would have required specific maintenance.

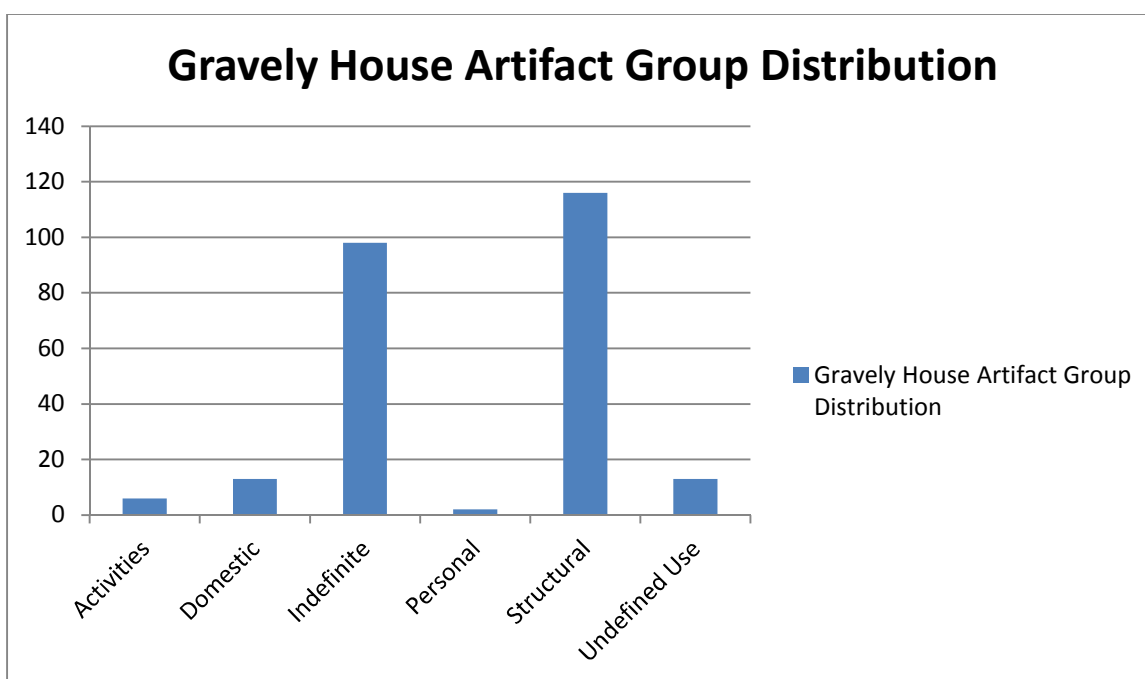
Gravelly House Artifact Groups

Once the excavation was completed, the recovered materials were taken to the Virginia Museum of Natural History for storage and analysis. The process of cataloging historic period² artifacts at the VMNH involves dividing the items into groups based on the way in which they would have been used. These groups are activities, domestic, indefinite, personal, structural, and undefined³. Items classified under activities are the things that have a specifically defined purpose, but are not considered a part of common home life, i.e. religious items, tools, transportation, and writing implements. Domestic items are things used in the home, by the residents, and include cleaning materials, items for clothing maintenance, food, food preparation materials, food storage containers, furnishings, heating and lighting fixtures, miscellaneous closures, and miscellaneous containers. Indefinite artifacts can include health or food items as well as heating and lighting fixtures that are ambiguous, possibly from a non-domestic setting,

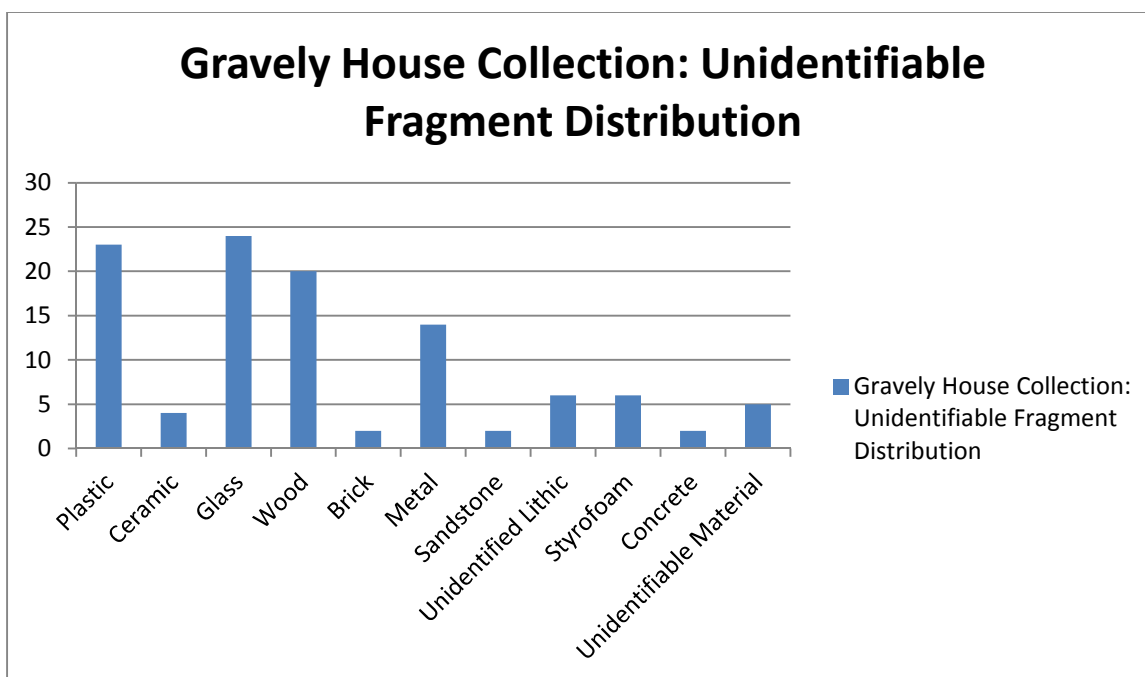
i.e. they are not undoubtedly related to a home. The group “indefinite” also includes beads, containers, closures, fasteners, and other miscellaneous items that could potentially have been used for a variety of purposes. An item is indefinite not necessarily because it cannot be identified by material, or even as a type of artifact, but because the context in which it would have been used is indeterminate.

Items are classified as personal rather than domestic because they apply directly to an individual rather than to a household as a whole; these artifacts include clothing, footwear, grooming objects, health items, miscellaneous containers, toys, and containers and paraphernalia related to social drugs (alcohol, opium, tobacco). Structural artifacts are those related to electrical systems, hardware, and structural materials. The last grouping of historic artifacts is that of undefined use, which includes fuel and waste products such as coal and slag.

The artifacts collected from the Gravelly House site fall into groups as follows⁴:



The artifacts in this collection total 253 catalog entries, divided among the six groups. Many items are very small fragments, meaning only the material can be identified, and not the larger whole of which the artifact was a part. A total of 108 items were recorded as unidentifiable fragments of the following materials: plastic, ceramic, glass, wood, brick, metal, sandstone, unidentified lithic, styrofoam, concrete, and unidentified material. Among the fragments, the most common materials were plastic, glass, and wood. Plastic and glass remain because they do not decompose, but rather fragment into smaller and smaller pieces. The wood perhaps remained because it was a part of siding or another structural or domestic item for which it would have been treated with chemicals to increase its longevity and strength.



Activities, Domestic, Indefinite, and Personal Artifact Groups

Items excavated from the Gravely House site and cataloged in the activities group include a cat food can lid, a U.S. penny minted in 1977, paint chips, a sand paper belt, and a small branch from an artificial Christmas tree (see Appendix B, photographs 1-3, for artifact photographs). This range of artifacts reveals the dynamic, ever-changing nature of archaeology. Although the structure was constructed in the early twentieth century, with which it is associated architecturally, it was inhabited into the twenty-first century; a clear line between “history” and “the present” does not exist. The modern artifacts in conjunction with the historic ones are a testament to the change of material culture over the last century in America, which is just what archaeology seeks to identify.

Items that were excavated and have been classified as domestic include fragments of plastic plant pots, an aluminum can tab, a large fixture for a furnace, a preserved plant stem believed to be from a gourd, plastic or cellophane wrappers, two styrofoam coffee cups, and metal bars from a folding lawn chair (see Appendix B, photographs 4-9). Because the structure was intentionally demolished, it follows that few items of this type would remain. Domestic items would have been removed by the Gravely family when the property was transferred into the possession of the church, and then the church would have removed the remaining items prior to demolition.

An unidentifiable pipe fixture, a fragmented animal bone, a piece of milk glass, and a snail shell were all excavated and classified with an indefinite purpose (see Appendix B, photographs 10-14). The pipe fixture was made from metal that had become extremely oxidized in the ground. The fact that metal plumbing had been used in the Gravely home was one of the contributing factors in the demolition of the structure because the pipes were deteriorating at a

rate that was disconcerting to the landowners (Hall). However, not enough of the pipe was recovered to allow for an interpretation as to the purpose it may have served in the structure. The bone fragment was not identified to a species; there was nothing abnormal about it that would prompt further investigation, but rather it is a bone fragment that would reasonably be expected in an assemblage from south-western Virginia. The same can be said for the snail shell; neither organic item appears to have been brought in from elsewhere but rather naturally occurred in the area.

The vessel which produced the milk glass fragment could not be determined due to the small size of the fragment, but also because it was lacking any identifying features, such as a maker's mark. Milk glass was used for both domestic and commercial purposes; its white color is achieved by using ingredients that have a high calcium content. Unlike more translucent glass, which is used for windows and food and beverage storage, milk glass was used more often for "...tablewares, containers, and lighting devices..." beginning toward the end of the 19th Century (Jones and Sullivan 14).

Styrofoam as a material was invented by scientists working for the Dow Chemical Company in the 1940s for industrial purposes. Since then the material has been modified and is now used in food storage and distribution due to its resistance to moisture and insulating qualities (Miller, et. al 16). Only two artifacts in the assemblage were identified as personal items, a fragment of a hair comb and a deflated balloon (see Appendix B, photographs 15-16). The comb is black in color and made of plastic, but not distinctive to any given period in history. The balloon is made of a rubber-like material, and the knot is still visible in the end although there are holes in the body of it.

Structural Artifact Group

The largest group of artifacts recovered from the Gravelly site was the structural group, including structural materials as well as hardware. The bulk of the structure was removed from the location after it was bulldozed so that the area could be used for a new purpose; however, evidence of the structure remained in the ground. Wooden siding, nails, asphalt, concrete, plaster, brick, mortar, window glass, screws, and an electrical conduit were all recovered and classified as structural components of the Gravelly House (see Appendix B, photographs 17-26).

Two slats of wooden siding were found, both of which had remnants of white paint on one side. One slat still had nails in it, while the other piece had visible holes where nails would have been when the siding was attached to the structure. Presumably, some of the wooden fragments that were deemed unidentifiable could have come from the wooden siding on the home.

The first documented use of asphalt in America was in Philadelphia in 1871, and this material quickly took the place of gravel and dirt roads, eventually rising to today's prominence as a primary paving method for roads across the country, while also being used in driveways and parking lots (G. L. Miller et. al). The driveway to the Gravelly House was made of gravel, however, asphalt could have been used on the property for another purpose and has been used by the nearby church for its driveways and parking lots (Moore, "Field Notes").

Nails

Nails that remain on archaeological sites can be used to interpret the kind of structure that once stood in the location. Primarily, the bend, or lack thereof, in the nail is used in this determination. From the Gravelly Site, there were 10 whole nails and 6 fragments of nails. Of

these, 3 were bent and the rest were either straight or indeterminate (see Appendix B, photographs 20-21).

The term “nail rain” is used to describe the deposits of nails found where structures from the nineteenth and twentieth centuries stood (Young 56). The different ways in which buildings transition from used to unused result in different nail patterns in the archaeological record: natural decay or intentional demolition (Young 56). When a building is left to fall apart on its own, the primary type of nails recovered are unaltered; they were either dropped during construction or entered the ground after the structure decayed, but maintained their straight shape because they were driven straight into the wood. A demolished building, however, should have a combination of unaltered nails and pulled nails because some nails would have been left within the structure (along with those already in the ground after construction) but other portions of the structure were most likely taken apart manually, resulting in the arc shape of pulled nails (Young 57).

This logic can be applied to the nail patterning of the ten nails found on the Gravely Site. The combination of unaltered and pulled nails is consistent with that of a building which was intentionally torn down, however there were significantly fewer nails recovered from the Gravely Site as compared to the sites from which Young obtained her data for the nail rain theory, with each of those sites producing a few hundred nails (Young).

Concrete

Concrete is used for roads and sidewalks as well as in foundations and the actual structure of buildings. It is a combination of cement, aggregate materials, and water. Often, Portland cement is used, which is a heated mixture of limestone and various minerals (Adams

30). Aggregate is added to the mixture because it provides additional strength while also reducing the degree to which the concrete can shrink; this can include sand, gravel, and other crushed stone (Adams 34). Ultimately, water helps the mixture to harden, but in the construction process it makes the mixture malleable enough to be manipulated by workers (Adams 43).

The pieces of concrete collected from the Gravely site were all fragments; there were no complete concrete objects. There were 95 fragments in total, of which 27 were described as flat; this meaning that at least one side is flat, whether it was a part of a block or a fragment of sidewalk. The purpose of the concrete recovered from the site could not be determined based on these fragments.

Brick

Various types of bricks are used in construction of a structure. Building brick, or common brick, is used to create the inside of walls and is not visible on the exterior. Face bricks are used on the outside of a structure, are better able to withstand weathering, and are intentionally more aesthetically appealing (Adams 405-406). Bricks used in fireplaces or around other heat sources, such as boilers or stoves, are formed from specific clay designed to resist high heat levels (Adams 406).

From the Gravely House, there were 80 brick fragments, 3 half bricks, and 2 whole bricks. Among these, 13 pieces had mortar remnants on one side, 1 had mortar on two sides, and one fragment had white paint on one side. The purposes for which the bricks were used, however, was not determined. Some of the brick was distinctly more orange in color, while others were a dark red and the red bricks had a higher density and may have been used as foundation bricks or to surround a heat source.

Mortar

Mortar can be white or various colors; the addition of minerals can create the desired color. It is composed of cementitious materials and masonry sand (Adams 337-338). Twenty seven pieces of mortar in varying sizes were recovered from the Gravely site. The fragments differed in hardness from a very concrete-like consistency to a softness similar to plaster. Some fragments also had remnants of plaster and paint on one side of them, indicating that they may have been a part of a painted brick façade. The mortar used to hold bricks together differs in accordance with the purpose of the structure; foundations, for example require a different consistency and amount of mortar than a non-loadbearing structure (Adams 427-428).

Window Glass

The three ingredients that comprise glass are silica (as sand, sandstone, or quartz), soda (in a salt cake), and lime (often from limestone) and they are fused into one material at temperatures between 2500 and 3000 degrees Fahrenheit (Harboe 32). There was little manufacture of window glass in the United States until the end of the nineteenth century (Harboe 32). Around the turn of the twentieth century the two types of glass being produced in America were "...window glass, which was blown, and plate glass which was rolled, ground and polished" (Harboe 33).

Window glass recovered from the Gravely House was either colorless or showed a slightly green or bluish tint (the tints are recorded in the catalog according to the Munsell Color Guide). There were 11 fragments of colorless glass, 93 of blue glass, and 121 of green glass. All of the fragments were completely flat, with no curvature, indicating that they would not have been used for a glass vessel, but most likely served as a window or mirror. As indicated by the

photographs of the structure, the materials purchased for the home, and the architectural plan, there were multiple windows in each room, thus window glass fragments remain in the archaeological record despite the demolition of the home.

Undefined Artifact Group

These artifacts include pieces of slag and coal (see Appendix B, photographs 27-28). The presence of these objects in context with an identified component from a domestic furnace indicate that the house may have been heated by coal, at least during the time that William and Caroline Gravely would have been living there, however the structure was most likely transitioned to a more modern electric and/or gas heat source later in the 1900s. Coal was a common source of domestic heat across the United States from the nineteenth century into the twentieth century because it heated homes more effectively and efficiently than traditional fireplaces, which caused drafts, and more than half of the United States have some amount of coal resources (Harrington 1, 4, 33).

The material culture left by the Gravely family is limited, but the information that was collected, in conjunction with the historical records that remain, is adequate to recreate the kind of life that the family would have lived. Although the demolition process took away many of the material remains from the site, that material is not gone entirely, but rather its context has shifted. Material culture plays an important role in interpreting the past, and this form of culture is as dynamic as the people groups who produce it, and the way in which artifacts will be collected and studied in the future may potentially change as well.

A Differing Destructive Method and its Impact on Material Remains

The Gravely House was cleared of nearly all its contents and then bulldozed, leaving very little material culture in the archaeological record considering that the house was utilized for nearly a century. This method of demolition and waste removal seems to be reflective of the ideology that is dominant in mainstream America today: everything is disposable and waste needs to be completely removed from the area. Trash and unnecessary clutter are not kept around when they could be sent off to a landfill.

But absolute bulldozer-demolition is not the only method used to quickly remove twentieth century structures. Another building in Martinsville, the Baldwin Business Center, was also demolished. The bulk of the debris was contained within the basement of the building and left there rather than being removed from the site. A layer of fill dirt was packed onto the lot and then the lot was used as an open space by the city with the artifacts remaining underground (Moore, "Excavations" 172-173). Although this method was also destructive and resulted in the artifacts being fragmented upon recovery, the material culture was rich and well preserved in this environment and it was still within its known context rather than being placed in a landfill some distance from the original location. Disposability may serve to redefine the idea of context in archaeology of the twentieth and twenty first centuries.

Archaeology in a Disposable Society

"The grating of metal teeth on concrete, the pounding of a breaker, dust and noise—typical sights and sounds on the initial stages of any urban excavation, as mechanical excavators rip up modern surfaces and foundations. It is normal practice on archaeological excavations, particularly those in cities....for the upper layers of a site to be machined or dug away in order to

get down to the ‘archaeology’” (Lucas, “Modern Disturbances” 114). A higher value is sometimes placed on sites that are older chronologically, but why is this so? “...there can be no date or time after which ...[one] might say that this is no longer archaeology...” (Lucas, “Modern Disturbances” 115). If things from the early twentieth century are already being destroyed, why should there not be a goal to recover as much information as possible from them?

Sometimes modern structures, even if abandoned, are ignored as archaeologically significant because they are “young;” this has an effect on conservation efforts (if any are made) as well as possibilities for repurposing the structures and trying to consider what parts of “heritage” are worth preserving (Pétursdóttir 33).

The way in which each new generation lives its life can impact the material legacy that the previous generation left behind, and these effects are not always positive. The landscaping techniques used in the eighteenth and nineteenth centuries, for example, have been observed to destroy some evidence of earlier occupation in some cases, making the modern site the only one available for archaeologists to study, even if these time periods are not yet considered as “archaeologically significant” in some cases (Yentsch 6).

The information that archaeologists gather from excavating a house site often reveals characteristics about the family, or families, who lived in the home; this does not, however, mean that this particular family is indicative of other families of their time and place. Each group is unique and may not be an accurate representation of their era, area, and socio-economic class (Henry 11). “Context is where meaning is located and constituted and provides the key to its interpretation. Recovery of meaning is predicated on recovery of context because context not only frames meaning by tying it to its actual situations and events, but it is inextricably bound up with meaning” (Beaudry, Cook, and Mrozowski 281). Without context, the artifacts tell much

less of a story. Context takes into consideration the location of an artifact in relation to those around it, as well as the historical period in which the item was deposited. A ceramic fragment found with no context could be potentially identified by its glaze and material composition, but beyond that there is very little to be learned. A ceramic fragment found in context with a houselot could indicate the wealth of the family (i.e. the quality of ceramic they were able to purchase), adding more cultural value to the material item.

It is worth noting that "...the cultural value of archaeology lies not solely in the grand narratives of the past. It is not just in synthetic works, popular books, museums, or heritage sites that archaeology performs its cultural work. Any segment or part of archaeological practice, even its most scientific, mundane operations, is potentially able to participate in a wider cultural project" (Lucas, "Modern Disturbances" 119). These "mundane operations" certainly include the less-than-glamorous job of sifting through hundreds of pounds of refuse in a landfill because that may be what is necessary to understand human culture in centuries to come.

A study of people's trash also reveals the inconsistencies between what people believe about their consumption and actuality. The trash mounds in prehistoric sites are desirable to archaeologists because they are close to where people lived and they generally contain a high density of artifacts in a small space and are very indicative of behavior (Rathje and Murphy 10). And this applies in modern archaeology as well; the things that people throw away or leave behind often tell the most about them. "...[T]he creation of garbage is an unequivocal sign of a human presence" (Rathje and Murphy 10). Because, as a society, modern America produces so much garbage, presumably there is much to be learned from the twentieth century on, when this period eventually comes under systematic archaeological scrutiny (Rathje and Murphy 11).

“Garbage most usefully comes alive when it can be viewed in the context of broad patterns, for it is mainly in patterns that the links between artifacts and behaviors can be discerned” (Rathje and Murphy 19). On a national level, there is a considerable amount of data that can be studied regarding the disposal habits of Americans since the turn of the twentieth century. By focusing on a community dump or landfill, “garbologists” are able to collect significant data regarding the culture and material lives of the people living there (Rathje and Murphy 24). Archaeologists can learn things from the scatter of artifacts, namely from the litter patterns in a given area. This aspect of modern material culture may be marginal to the thoughts of most people, but behavior patterns can sometimes be interpreted from this data (Shanks 20).

One of the problems arising from the remnants left by the twentieth and twenty-first centuries in landfills is that these items are extremely fragmented. It is challenging to interpret material culture on such a small and detached scale, and the end result may be that the artifacts have to be viewed together as a larger picture (Rathje and Murphy 11).

The concept of biodegradability is introduced often in relation to the garbage of today and the sheer amount of it, but archaeologically speaking, it is always the nonbiodegradable things that have been studied: stone tools, fired ceramics, etc. “[F]rom the beginning of time nonbiodegradability has been a strikingly constant, even predominant, feature of garbage. Stone tools have remained intact for more than two million years, in every kind of environment” (Rathje and Murphy 37-38). A common complaint is that the last few centuries have given way to generations of consumers who throw things away needlessly. However, the fact that throughout the course of history and prehistory some of the most coveted and informative artifacts were things that were intact, or at least nearly so, it could be considered that disposal, at

least to some degree, is something that people simply do without conscious considerations (Rathje and Murphy 38).

In regards to the archaeological context of garbage, trash is not always dumped near the site of its original use. Even without considering individuals taking trash with them in their cars or bags and depositing it in public waste receptacles, but just taking into account that some of the nation's largest landfills take in truckloads of garbage every day from across the country. With this happening, the chances of understanding the cultural context from which sections of garbage came is, very challenging, if not impossible (Rathje and Murphy 106-109). Because landfill environments are not ideal composting conditions and items are not broken into small pieces before deposition, things are not breaking down at expected rates, leaving behind brand labels, dates, and other distinguishing features for the archaeological record (Rathje and Murphy 117).

Garbage may also serve to reinforce and/or correct historical records because documentary records are sometimes tampered with or changed for varying reasons, while trash deposits are not likely to be intentionally altered (Rathje and Murphy 11-12). Although the amount of written history available for study seems to increase with each century, there are still undocumented patterns in the ways people live that can only be interpreted through the archaeological patterns—this is how their stories are told (Yentsch 5).

For the archaeologists who venture to investigate the material culture of the most recent centuries, there is an increasing possibility that there will be historic documentation to use in collaboration with any artifactual evidence. This works both ways; historians can also use archaeological data to corroborate the records that they have, expanding the realm in which both disciplines can test their hypotheses (Stone 68). Although often not accurate, early maps can also give archaeologists a better concept of where historically significant sites might have been

located and provide a frame of reference for excavations (Seasholes 98). By the early nineteenth century, maps that included streets and buildings were becoming more abundant and reliable (Seasholes 103-104). Even if they only provide the investigator with a place to start above ground testing, it is still beneficial and can potentially expedite the entire process.

Conclusions

“The ruins of the past, the archaeological record—our material heritage—is incomplete, fragmented, discontinuous and silent,” but this does not mean that the silence cannot be broken (Pétursdóttir 48). The archaeology of the future may involve integrating new methods, such as methodically sorting thousands and thousands of pounds of garbage, but the discipline is designed to trace the changes in human history, so logically the study will have to change to accurately reflect behavior.

Context, as it is traditionally defined, means that the location in which an artifact is found can provide information about who used it and what purpose it may have served, as well as a tentative timeline for its deposition. In modern disposable culture, however, significant amounts of material are being combined together in central locations (landfills, dumps, etc.) that may reflect the culture of a neighborhood, city, or even an entire state. Perhaps the idea of archaeological context will need to shift as twentieth and twenty-first century archaeology become more common and investigators begin encountering sites that are known to have been occupied based on historical documentation, but where virtually no material culture remains to verify that.

The popular idea is often that archaeology should deal primarily with the distant human past; this may also need to change. As is indicated by the Gravelly House, historically significant

sites from the early twentieth century are already being destroyed. This adds a sense of urgency to more recent historic archaeological endeavors; the picture that can be drawn from historic documents, and potentially from landfill samples, does not represent the scope of a material culture as is expected through current archaeological methods. If sites, such as the Gravely House, are being removed from their landscapes to make way for more “modern” structures, then perhaps steps should be taken to capture the essence of these sites before they become salvage archaeology projects.

The story told about past peoples by the things they leave behind is how modern people understand the past from whence they come. Sites are categorized historically so that their unique, individual context fits within the larger historical context. In America, there are pre-European contact sites, colonial settlements, Civil War battlefields and many more, and the time will come when the turn of the twentieth century becomes its own distinct group. The technological advances and cultural changes that took place during the twentieth century are remarkable; simply comparing the culture in which the Gravely House was constructed in to the culture in which it was destroyed reveals a stark contrast. There is much to be learned and recorded from this time period, and although there was a significant amount of record-keeping and historical documentation, there are things that people simply do not acknowledge and record about themselves. Only the archaeology can reveal to us the characteristics of a culture that they themselves do not even recognize.

Suggestions for Further Research into the Gravely House

Despite the scant material items left, post-demolition, at the Gravely Site, the historic record contains many more documents that could serve to create a more holistic picture of the

family. Additionally, due to the importance of the Gravelys' influence in the community, there are oral histories that could be collected—Nina Gravelly, the last owner of the home, for example, taught piano lessons there for years, undoubtedly making an impact on the lives of her students.

Additional research could begin with contacting the J. Burgess Frith Construction Company and the First Baptist Church to determine where specific items from the home may have gone. A yard sale was held to remove the interior furnishings of the home as quickly as possible, but further research might be able to reveal whether or not any items were given to specific family members or locations and what these items may have been. The *Martinsville Bulletin* cited that some things were to be preserved for posterity and it may be possible to determine what these things were. This would also better illustrate the outcome of the Gravelys' material culture; there was very little preserved archaeologically, but perhaps some things were distributed to family and community members.

It is also possible to investigate more of the Gravelys' family history. The extensive family tree branching from Joseph Gravelly and his ten children has resulted in a rich background from which the Gravelys of the twentieth century came. The family papers preserved at the Library of Virginia contain photographs, receipts, correspondence (both within and outside the family), deed information, and assorted other documents that could be examined to learn more about the human side of the Gravelly House story. The specific ownership of property by the Gravelys across Martinsville and Henry County could be traced as well; the earliest deed records in the county date to 1777 and continue to present day. There is the possibility that there were similar structures constructed and owned by other members of the family around the same time period, and with the names and owners of properties one might be able to learn more about this.

Seeking to further create a picture of the family itself, there are oral histories to be collected in the community. A group of people that was as far-reaching and influential as the Gravelys certainly left their mark in the minds of the people they came into contact with. There is also an active historical society in Martinsville and Henry County that likely has information on the Gravelys already compiled.

As with any research endeavor, there are always additional channels to be examined. My study primarily focused on the limited historic record directly related to this single Gravelly property and only briefly looked into the culture of the family themselves. But there is certainly more to be found in that regard. The paths of family heirlooms may be traceable through word of mouth. The locations of similar “Gravelly Houses” may be determined through deed research. A sense of who the Gravelys were as people may be found through oral histories. No project can explore all the options for finding information, and there is undoubtedly much more to be learned from this family.

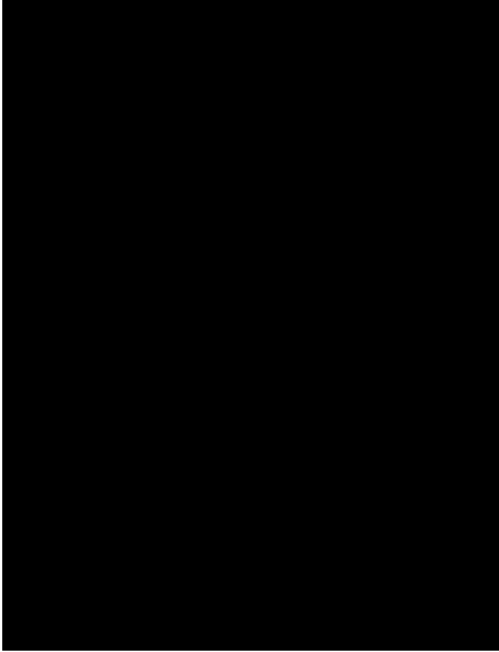
Notes

1. These “things” preserved for future generations included some of the personal and domestic items that had once been in the home but were not well represented in the archaeological record.
2. Historic archaeology in the United States covers the lives of people through a combination of written records and material culture, thus only refers to the actions of cultures after European contact.

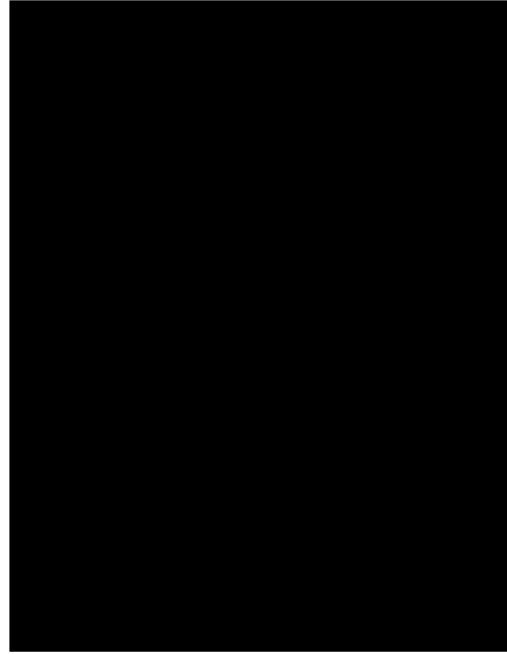
Archaeological Institute of America. *Introduction to Archaeology: Glossary*. 2014. Web. 19 July 2014.

3. The groups defined for the artifacts are not permanent divisions and can be revised, altered, and/or expanded at the discretion of the archaeology curator.
4. A unit is an entry in the Virginia Museum of Natural History catalog, rather than individual items; many catalog entries have multiple fragments or pieces, but when there is nothing diagnostic about the individual pieces they can reasonably be grouped together in the catalog.

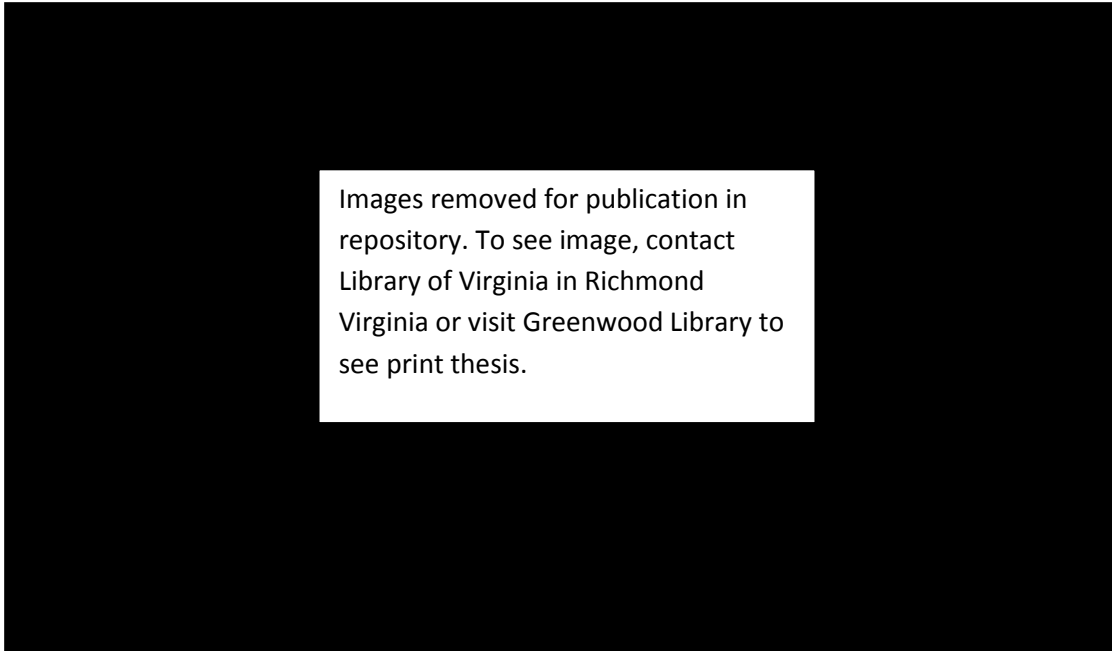
Appendix A: Historical Context



Caroline Anson Gravelly, 1903
Anson-Greene-Gravelly Family Papers



William Gravelly
Anson-Greene-Gravelly Family Papers



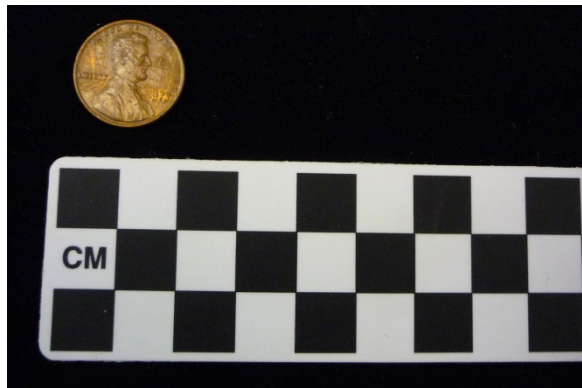
Images removed for publication in repository. To see image, contact Library of Virginia in Richmond Virginia or visit Greenwood Library to see print thesis.

Appendix B: Artifact Typology

(Personal photographs; artifacts housed at the Virginia Museum of Natural History in Martinsville, Virginia)

Activities Artifact Group

1.



1977 US penny, catalog # 65146

2.



Belt sand paper, catalog # 65234

3.



Artificial Christmas tree fragment, catalog # 65053

Domestic Artifact Group

4.



Plastic plant pot, catalog # 65004

5.



Plastic plant pot, catalog # 65004

6.



Can tab, catalog # 65007

7.



Furnace fixture, catalog # 65009

8.



Furnace fixture, catalog # 65009

9.



Furnace fixture, catalog # 65009

Indefinite Artifact Group

10.



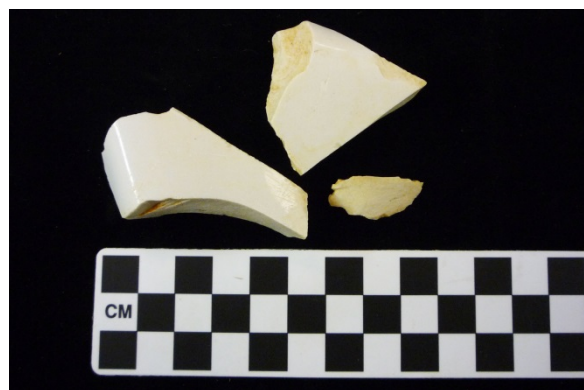
Pipe, catalog # 65097

11.



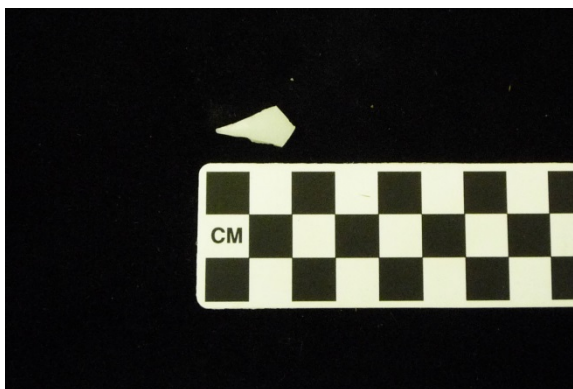
Pipe, catalog # 65097

12.



Porcelain, catalog # 65228

13.



Milk glass, catalog # 65198

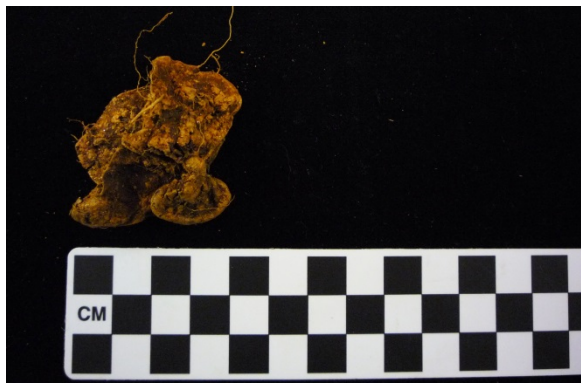
14.



Twisted metal, catalog # 65035

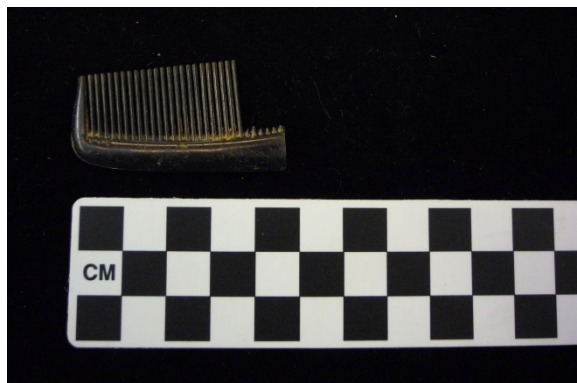
Personal Artifact Group

15.



Balloon, catalog # 65154

16.



Comb, catalog # 65181

Structural Artifact Group

17.



Siding with nails, catalog # 65001

18.



Siding with nails, catalog # 65001

19.



Siding with nails, catalog # 65001

20.



Bent nails, catalog # 65076, 65036, 65143

21.



Straight nails, catalog # 65124, 65024, 65013, 65142

61

22.



Brick fragments, catalog # 66479

23.



Brick fragment with mortar, catalog # 66463

24.



Brick, catalog # 66473

25.



Window glass, catalog # 65115

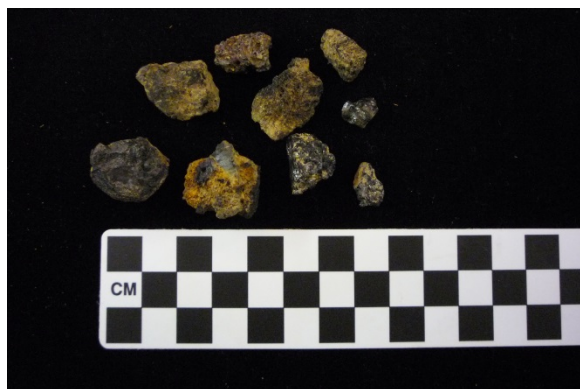
26.



Screw, catalog # 65163

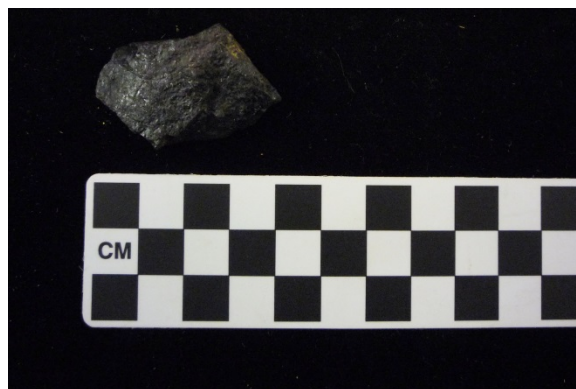
Undefined Artifact Group

27.



Slag, catalog # 65011

28.



Coal, catalog # 65032

Works Cited

- Adams, J.T. *The Complete Concrete, Masonry, and Brick Handbook*. New York: Arco Publishing, Inc., 1979. Print.
- André, Elizabeth. "Queen Anne." Photograph. uvm.edu The University of Vermont, 2011. Web. 11 Sept. 2014.
- Anson-Greene-Gravely Family Papers. Accession 38550. Personal papers collection. 1832-1999. Richmond: The Library of Virginia. Assorted print and image sources.
- Architectural Survey of Henry County—Martinsville, Virginia*. Prepared for the Henry County-Martinsville Preservation Alliance with the Rural Heritage Development Initiative, Virginia Department of Historic Resources, and National Trust for Historic Preservation. Roanoke: Hill Studio, P.C., 2009. Print.
- Badgely, Ken. "Burford House." Photograph. panoramio.com Google, Inc., 2 Oct. 2011. Web. 11 Sept. 2014.
- Beaudry, Mary C., Lauren J. Cook, and Stephen A. Mrozowski. "Artifacts and Active Voices: Material Culture as Social Discourse." *The Archaeology of Inequality*. Ed. Randall H. McGuire and Robert Paynter. Oxford: Blackwell Publishers, 1991. 150-191. Reprint in *Images of the Past: Readings in Historical Archaeology*. Ed. Charles E. Orsler, Jr. Walnut Creek, CA: AltaMira Press, 1996. 272-310. Web. 23 July 2014.
- Bragdon, Kathleen J. "Occupational Differences Reflected in Material Culture." *Documentary Archaeology in the New World*. Ed. Mary C. Beaudry. Cambridge: Cambridge University Press, 1988. 83-91. Print.
- City of Roanoke. "Roanoke City Market Building." Roanoke, 2014. Web. 17 May 2014.

- Cohen, Lizabeth, A. “Embellishing a Life of Labor: An Interpretation of the Material Culture of American Working-Class Homes, 1885-1915.” *Journal of American Culture* (n.d.): 752-775. Web. 22 Aug. 2014.
- Cook, Lauren J., Rebecca Yamin, and John P. McCarthy. “Shopping as Meaningful Action: Toward a Redefinition of Consumption in Historical Archaeology.” *Historical Archaeology* 30.4 (1996): 50-65. Web. 22 Aug. 2014.
- Court Records: Henry County Clerk’s Office, Martinsville, VA. Deed Book 33, page 445. Accessed 11 July 2014. Print.
- Court Records: Henry County Clerk’s Office, Martinsville, VA. Deed Book 34, page 458. Accessed 11 July 2014. Print.
- Deetz, James. “Material Culture and Archaeology—What’s the Difference?” *Historical Archaeology as the Science of Material Culture*. Spec. issue, *Historical Archaeology and the Importance of Material Things: Papers of the Thematic Symposium, Eighth Annual Meeting of the Society for Historical Archaeology*. Special Publication Series 2. 1977. 9-12. Print.
- Geerlings, Gerald K. *Metal Crafts in Architecture*. New York: Charles Scribner’s Sons, 1929 [1957]. Print.
- Glassie, Henry. “Artifact and Culture, Architecture and Society.” *American Material Culture and Folklife: A Prologue and Dialogue*. Ed. Simon J. Bronner. Logan, UT: Utah State University Press, 1992. 47-62. Print.
- Gordon, R.B., M. Bertram, and T. E. Graedel. “Metal Stocks and Sustainability.” Proceedings of the National Academy of Sciences, 2005. Web. 17 May 2014.

Gravelly House Collection. Virginia Museum of Natural History. Artifact numbers 65000-65234 and 66460-66479.

Hall, Debbie. "Safety Fears Led to Demolition of Gravelly House." *Martinsville Bulletin* 16 November 2005. Web.

Harboe, T. Gunny. "Window Glass Technology in the 20th Century: Glass Manufacturing in the United States." *Docomomo Journal* (2000): 32-38. Print.

Harrington, Geri. *Fireplace, Stoves, Hearths, and Inserts: A Coal & Wood-Burner's Guide & Catalog*. New York: Harper & Row Publishers, 1980. Print.

"Henry County." Photograph. virginiaplaces.org Virginia Places (Geography of Virginia), 2014. Web. 11 Sept. 2014.

"Henry County, VA Leatherwood." Martinsville and Henry County. mymartinsville.com, myhenrycounty.com, 2013-2014. Web. 17 May 2014.

Henry, Susan L. "Consumers, Commodities, and Choices: A General Model of Consumer Behavior." *Historical Archaeology* 25.2 (1991): 3-14. Web. 22 Aug. 2014.

Hill, Judith P.A. *A History of Henry County Virginia: with Biographical Sketches of its Most Prominent Citizens and Genealogical Histories of Half a Hundred of its Oldest Families*. Baltimore: Regional Publishing Company, 1976. Print.

"History." martinsville.com. Martinsville Henry County Chamber of Commerce, 2014. Web. 15 June 2014.

Hodder, Ian. "Human-Thing Entanglement: Towards an Integrated Archaeological Perspective." *Journal of the Royal Anthropological Institute* 17 (2011): 154-177. Web. 22 Aug. 2014.

Jones, Olive and Catherine Sullivan with contributions by George L. Miller, E. Ann Smith, Jane E. Harris, and Kevin Lunn. *The Parks Canada Glass Glossary for the Description of*

- Containers, Tableware, Flat Glass, and Closures*. Ottawa: Minister of Supply and Services Canada, 1985. Print.
- Kendrick, Desmond. "William Henry Gravely-Nina Gravely Home." Photograph. 6 November 2005. Print. 16 July 2014.
- "Lee House." Photograph. cmhpf.org Charlotte-Mecklenberg Historic Landmarks Commission, 2014. Web. 11 Sept. 2014.
- Lucas, Gavin. "Disposability and Dispossession in the Twentieth Century." *Journal of Material Culture* 7.5 (2002): 5-22. Web. 30 July 2014.
- Lucas, Gavin. "Modern Disturbances: On the Ambiguities of Archaeology." *Modernism/Modernity* 11.1 (2004): 109-120. Web. 22 Aug. 2014.
- Martin, Ann Smart. "Makers, Buyers, and Users: Consumerism as a Material Culture Framework." *Winterthur Portfolio* 28.2/3 (1993): 141-157. Web. 22 Aug. 2014.
- McAlester, Virginia and Lee McAlester. *A Field Guide to American Houses*. New York: Alfred A. Knopf, Inc., 1984. Print.
- Miller, George L., Patricia Samford, Ellen Shlasko, and Andrew Madsen. "Telling Time for Archaeologists." *Northeast Historical Archaeology* 29.1 (2000): 22. Web. 18 October 2014.
- Miller, Mark Richard and Rex Miller. *Carpenter's and Builder's Layout, Foundation, and Framing*. Indianapolis: Wiley Publishing, Inc., 2005. Web. 17 May 2014.
- Moore, Elizabeth A. "Excavations on the Baldwin Block (44HR0200)" *Archaeological Society of Virginia Quarterly Bulletin* 66.4 (2011): 169-180. Print.
- Moore, Elizabeth A. Field notes and forms from the Gravely House excavation. 2011. Print.

- Pedigo, Virginia G. and Lewis G. Pedigo. *History of Patrick and Henry Counties, Virginia*.
Baltimore: Regional Publishing Company, 1977. Print.
- Pétursdóttir, Þóra. “Concrete Matters: Ruins of Modernity and the Things Called Heritage.”
Journal of Social Archaeology 13.31 (2013): 31-52. Web. 23 July 2014.
- “Queen Anne.” Photograph. pecanplace.victorian.blogspot.com *Of Life and Houses*, 28 Nov.
2009. Web. 11 Sept. 2014.
- Rathje, William and Cullen Murphy. *Rubbish! The Archaeology of Garbage*. New York: Harper
Collins Publishers, 1992. Print.
- Seasholes, Nancy S. “On the Use of Historical Maps.” *Documentary Archaeology in the New
World*. Ed. Mary C. Beaudry. Cambridge: Cambridge University Press, 1988. 92-118.
Print.
- Shanks, Michael. “The Life of an Artifact.” *Fennoscandia Archeologica* 15 (1998): 15-42. Web.
22 Aug. 2014.
- “Starling Ave.” google.com/maps Google, Inc., 2014. Web. 11 Sept. 2014.
- Stone, Gary Wheeler. “Artifacts are not Enough.” *Documentary Archaeology in the New World*.
Ed. Mary C. Beaudry. Cambridge: Cambridge University Press, 1988. 68-77. Print.
- Strasser, Susan. *Waste and Want*. New York: Metropolitan Books, 1999. Print.
- United States Department of Agriculture; Forest Products Laboratory, Forest Service. *Moisture
Content of Wood in Use*. 1973. Web. 17 May 2014.
- Yentsch, Anne. “Legends, Houses, Families, and Myths: Relationships Between Material
Culture and American Ideology.” *Documentary Archaeology in the New World*. Ed.
Mary C. Beaudry. Cambridge: Cambridge University Press, 1988. 5-19. Print.

Young, Amy L. "Spatial Patterning on a Nineteenth- Century Appalachian Houselot: Evidence from Nail Analysis." *Southeastern Archaeology* 13.1 (1994): 56-63. Print.