

ABSTRACT

Title of Thesis:

MINDING YOUR FEET: AN EXAMINATION
OF CEMETERY RECORDATION AND
ANALYSIS THROUGH GEOSPATIAL
DOCUMENTATION IN FAIRFAX COUNTY,
VIRGINIA.

Colleen Boyle, Master of Professional Studies
Degree, Cultural and Heritage Resource
Management, 2024

Thesis Directed By:

Dr. Matthew Palus, Department of Anthropology

Cemeteries are a wealth of information and are a vital cultural resource for the communities in which they reside. These spaces reflect the cultural and community practices, the evolution of public space, economic conditions, and religious traditions of those interred. This thesis seeks to answer the research question: can cemetery landscapes be understood using a phenomenological approach to interpreting cultural patterns and trends in a digital landscape? Understanding cemetery landscapes is vital to the understanding and preservation of the cultural landscapes of these communities, so clear and accurate documentation of these sites is possible and necessary when using modern geospatial technology. This thesis examines the results of the Fairfax County Park Authority's Archaeology and Collections Branch cemetery survey using geospatial mapping methodologies to record cemetery boundaries and inventory grave and grave marker locations. Through the examination of each of the three cemeteries highlighted throughout this thesis, it was determined that a hybrid approach to cemetery analysis utilizing the theoretical

framework of phenomenology in conjunction with the broader perspective offered through digital data and mapping allows for a greater understanding of a space and its use over time.

MINDING YOUR FEET: AN EXAMINATION OF CEMETERY RECORDATION
AND ANALYSIS THROUGH GEOSPATIAL DOCUMENTATION IN
FAIRFAX COUNTY, VIRGINIA

by

Colleen Boyle

Thesis submitted to the Faculty of the Graduate School of the
University of Maryland, College Park, in partial fulfillment
of the requirements for the degree of
Master of Professional Studies
2024

Advisory Committee:
Dr. Matthew Palus, Chair
Dr. Kathryn Lafrenz Samuels
Dr. Stephen Brighton

© Copyright by
Colleen Boyle
2024

Acknowledgements

I want to thank my professors from the Cultural Heritage and Resource Management program at the University of Maryland and my thesis committee. Their guidance throughout my time here has been invaluable, and I am incredibly grateful for the skills I have gained and honed through their coursework.

I could not have completed this thesis without my wonderful and supportive coworkers from the Fairfax County Archaeology and Collections Branch, some of whom are featured in this thesis, including Elizabeth Crowell, Brittany Blanchard, Tyler Ball, Amanda Benge, Alisa Pettitt, and Aimee Wells. Without their work on the cemetery survey initiative, there would be no data for this thesis, nor would I have had the motivation to complete this project.

I also want to thank my friends and family who have supported me and put up with my reclusive tendencies these last few months. I owe you all a drink.

Finally, I would like to acknowledge those who have taken the time to research, clean, preserve, and care for the cemeteries of Fairfax County. These spaces are invaluable and vulnerable, and I could not have completed this document without their efforts.

Table of Contents

Acknowledgements	ii
Table of Contents	iii
List of Tables	iv
List of Figures	v
Chapter 1: Introduction	1
Thesis Outline	3
Chapter 2: Theory of Geographic Information Systems in Deathscapes; Phenomenology and Technology	7
GIS and Archaeological Theory	7
GIS and Theory in Cemetery Surveys	11
Chapter 3: Historical Context for Cemeteries of Fairfax County	15
Fairfax County Cemetery Survey	15
A Brief History of the Settlement of Fairfax County	17
Peake Family Cemetery (003)	19
Fairfax County Cemetery (172)	21
Brown-Wheeler Cemetery (009)	24
Chapter 4: Cemetery Survey Methods and Data Collection	28
Survey Planning	28
Field Methods	30
<i>Baseline Cemetery Survey</i>	31
<i>Graves and Grave Marker Inventory</i>	33
<i>Feature Collection</i>	36
Chapter 5: Cemetery Survey Results	38
General Survey Results and Observations	38
Peake Family Cemetery (003) Results	40
Fairfax County Cemetery (172) Results	45
Brown-Wheeler Cemetery (009) Results	52
Chapter 6: Analysis of Cemetery Survey Results	55
Introduction	55
Peake Family Cemetery (003)	56
Fairfax County Cemetery (172)	61
Brown-Wheeler Cemetery (009)	69
Conclusion	70
Chapter 7: Conclusions and Further Research	72
Appendix A	78
Bibliography	82

List of Tables

Table 1: Summary of Cemetery Survey Form	32
Table 2: Summary of fields used in Grave Inventory form	35
Table 3: Summary of fields used in Grave Marker Inventory form	35
Table 4: Fairfax County Cemetery (172) grave marker distribution totals by descriptor.	50
Table 5: Fairfax County Cemetery (172) Grave Marker Counts by Date of Death	62
Table 6: Bounded Grave Feature Descriptors.....	67

List of Figures

Figure 1: Vicinity map	3
Figure 2: Peak Family Cemetery circa 1980s	21
Figure 3: Scan of the plot map of Potter's Field	22
Figure 4: Photograph of the Fairfax County Cemetery	24
Figure 5: View of the stone archway to the Brown-Wheeler Cemetery (009)	26
Figure 6: Cemeteries by Owner Type totals included in the ACB's Fairfax County Cemetery Survey	39
Figure 7: Peake Family Cemetery (003) ACB cemetery survey, grave, and grave marker results map, 2023.	42
Figure 8: Peake Family Cemetery (003) grave markers,	43
Figure 9: Peake Family Cemetery grave marker damage	44
Figure 10: Peake Family Cemetery (003) overview and probable fieldstone markers.....	45
Figure 11: Fairfax County Cemetery (172) cemetery survey, grave, and grave marker inventory results map	46
Figure 12: Uncovered grave markers in the Fairfax County Cemetery (172)	47
Figure 13: Selection of bounded grave features in the Fairfax County Cemetery (172)..	51
Figure 14: Brown-Wheeler Cemetery (009), ACB cemetery survey results map, 2023. .	52
Figure 15: Brown-Wheeler Cemetery (009) site conditions	53
Figure 16: Map of the Peake Family Cemetery (003) grave markers by family group	57
Figure 17: Humphrey and Mary Peake grave locations.....	58
Figure 18: Peake Family Cemetery (003) feature and grave marker locations	60
Figure 19: Fairfax County Cemetery (172) grave markers categorized by date of death ..	63
Figure 20: Scan of the grave plot map of Potters Field	64
Figure 21: Bounded and covered grave, Fairfax County Cemetery (172).....	65
Figure 22: Bounded and covered grave feature headstones in Fairfax County Cemetery (172).....	66
Figure 23: Grave of Gloria L. Scales, the earliest known occurrence of a bounded grave in the Fairfax County Cemetery (172)	68

Chapter 1: Introduction

Cemeteries are a wealth of information and a vital cultural resource within communities worldwide; therefore, documenting these sites is also vitally important. The thesis aims to answer the research question: can cemetery landscapes be understood using a phenomenological approach to interpreting cultural patterns and trends in a digital landscape? In this context, cultural patterns are defined as broad data trends that can be attributed to the actions, beliefs, trends, or social norms reflected in the burial practices noted in historical documentation and identified in the data collected. The data and methodologies presented and outlined in this thesis stem from the Fairfax County Park Authority's (FCPA) Archaeology and Collections Branch's (ACB) ongoing survey of 363 cemeteries across Fairfax County. These spaces can reflect the cultural, religious, and community practices of those interred but remain at risk when inaccurately recorded or undocumented. The foundation of historic preservation is the documentation of historic spaces. Cemeteries are often historic resources lost to time and permanently damaged without the protections offered through documentation. Understanding cemetery landscapes is vital to understanding and interpreting the cultural landscapes of associated communities and demonstrates how local history, the evolution of public spaces, and urban development interact on a local level. Clear and accurate documentation of these sites is necessary and can be accessible using modern geospatial technology.

The FCPA's ACB began conducting this survey in the Spring of 2022 and continues as of the writing of this thesis. Thirty years have passed since the previous inventory of these cemeteries was completed using a variety of primary sources and geospatial technology of the day to document their locations. This process resulted in inconsistent site data housed within the county and the state, placing these sites at risk from neglect, loss, and the rapid urban

development of Northern Virginia. Fairfax County archaeologists have developed field methodologies utilizing modern Geospatial Information Systems (GIS) to accurately document each cemetery using an EOS Arrow Gold Global Navigation Satellite System (GNSS) receiver and Environmental Systems Research Institute, Inc. (ESRI) Field Maps application to correct noted inconsistencies within the previously recorded site data. The ACB's project aims to update each cemetery's location information and provide information regarding site conditions, legal ownership, caretakers, site history of each resource, and, when feasible, headstone locations and transcriptions.

Background research was compiled for each cemetery prior to field documentation through a variety of sources, including county court records, newspapers, church records, previous surveys, state archaeology, and architectural records, as well as compared to the digital GIS shapefiles of each site housed with the Virginia Department of Historic Resources (VDHR). Each site is evaluated using this background research and is referred to by name and a designated three-digit number corresponding to documentation in the 1990s. For example, one of the cemeteries discussed in this thesis is referred to as the Peake Family Cemetery, with the associated number being 003; this is used to simplify the filing system for each site as they are often referenced by multiple names in historical documentation. Chapter 3 of this thesis provides more information regarding previous cemetery documentation within Fairfax County.

This thesis examines the methodology used and results of three cemeteries surveyed by ACB archaeologists from March through October 2023, including the Peake Family Cemetery (003), the Fairfax County Cemetery (172), and the Brown-Wheeler Cemetery (009) (Figure 1). Each site included in this survey will undergo the same base level of assessment, documenting visible site boundaries and current conditions. A small percentage of these cemeteries will also receive a second phase of recordation of graves and grave markers; most of these sites are owned and Maintained by the FCPA and Fairfax County Board of Supervisors (BOS). The three

cemeteries that are focused on were chosen for inclusion in this thesis as they represent different periods of activity, size, demographics, length of use, location, and current condition, and they vary in the type of documentation used during the survey. The Peake Family Cemetery (003) and the Fairfax County Cemetery (172) underwent the baseline cemetery survey and the second data collection phase with a grave and grave marker and inventory. In contrast, the Brown-Wheeler Cemetery (009) only underwent the baseline cemetery survey. Further discussion on this decision is included in Chapter 4 of this thesis.

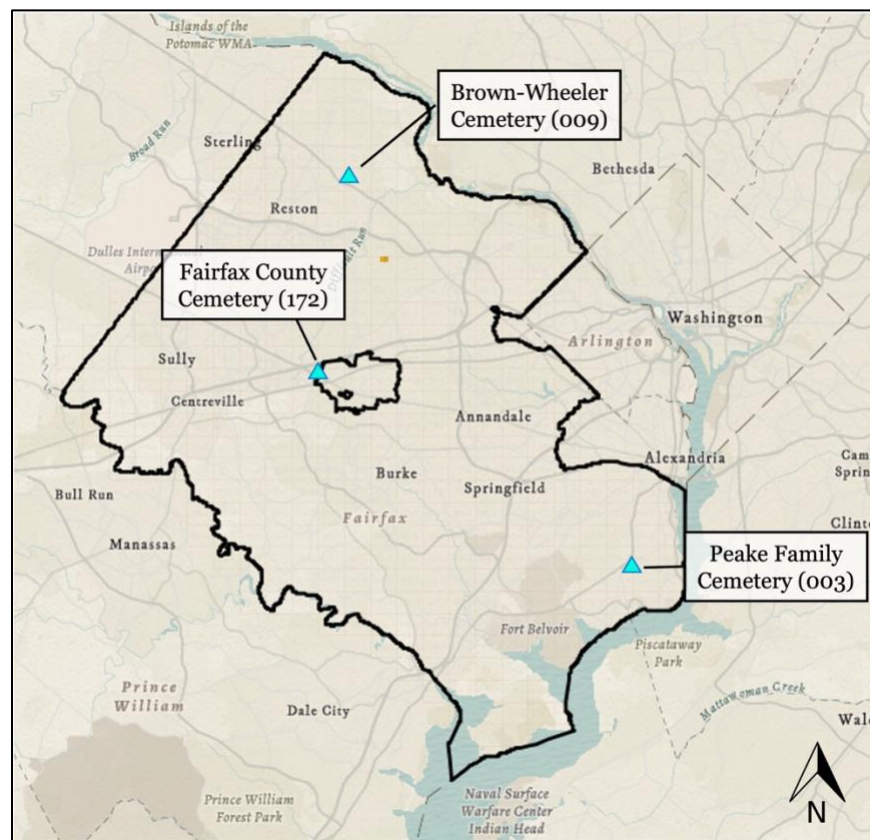


Figure 1: Vicinity map of the location of the Peake Family Cemetery (003), the Fairfax County Cemetery (172), and the Brown-Wheeler Cemetery (009) in Fairfax County, Virginia.

Thesis Outline

This thesis is comprised of six main chapters; the first being Chapter 2 which introduces the role of archaeological theory and its use in GIS-based cemetery studies. GIS is a practical tool that plays a vital role in the documentation, analysis, and sharing of archaeological information

but can be divisive when used in succession with theoretical concepts like phenomenology. This chapter discusses the use of GIS in the development of archaeological theory and explores critiques of its use in interpreting cultural data. Phenomenology was initially introduced as a method of questioning that seeks to humanize the study of landscapes through the sensory experience of physically moving through landscapes and rejects the use of representational data to understand the past. This theory, however, has been readapted by proponents of GIS to use technology to legitimize and quantify the ephemeral nature of this approach. This is demonstrated through case studies of cemetery documentation and interpretation using geographic locations of burials as a tool to support the use of space over time.

The next chapter discusses the historical context of the settlement patterns seen in northern Virginia beginning in the 17th century and known burial practices in rural Virginia from the 17th through 20th centuries. A history of cemetery research and documentation in Fairfax County follows, as well as a brief description of the ACB cemetery survey used as the primary data source for this thesis, with a more detailed history of three cemeteries highlighted in this thesis: the Peake Family Cemetery (003), Fairfax County Cemetery (172), and the Brown-Wheeler Cemetery (009). Each of these cemeteries represents an array of resources that both fit within understood burial patterns and exemplify the struggles that come with preserving these spaces amidst the rampant urban development of Fairfax County.

The following chapter describes the survey methodology and data collection standards developed by the ACB for the cemetery survey. Sources cited and used as inspiration for what data would be collected are listed, as is a brief description of the adaption of these sources into the digital data collection methodology established by the ACB for other archaeological fieldwork besides cemetery surveys. The ACB has developed two levels of survey, which are as follows: the baseline cemetery survey and the grave and grave marker inventory. The baseline cemetery survey was developed to record site boundaries and each cemetery's general conditions.

The grave and grave marker inventory records the location, condition, and transcription of each grave marker and grave across a cemetery. However, this level of detail is not used for each site but focuses on sites owned and managed by Fairfax County. A fourth data type is also discussed: feature data collection, which was developed and typically used for recording subsurface archaeological features but has been adapted to record anomalies encountered during the survey that do not fit within the baseline survey or subsequent inventories. Though these methods were not developed with this thesis in mind, providing context for initial data collection is worthy of consideration throughout the presentation of survey results and analysis chapters.

The next chapter discusses the results of the ACB's cemetery surveys of the Peake Family Cemetery (003), the Fairfax County Cemetery (172), and the Brown-Wheeler Cemetery (009). The results of a cemetery survey can allow for various interpretations of the collected data depending on the survey's goals. The ACB survey was not created with the goals of this thesis in mind but rather to meet the goals outlined in the 2021 document titled Fairfax County Cemetery Survey (Wells, Pettitt, and Benge 2021). The baseline cemetery survey is used to document the current conditions and location of each site discussed in this thesis, and both the Peake Family Cemetery (003) and the Fairfax County Cemetery (172) received further documentation through the grave marker, grave inventory, and notable surface features recorded and discussed within this chapter. The Brown Wheeler Cemetery (009) only received the baseline cemetery survey as it is under private ownership. However, in recording the site boundaries, the archaeologists noted that extensive road expansion has encroached on the cemetery and reduced its accessibility.

Following the results chapter is an analysis of each of the three cemetery survey results, aiming to determine whether any discernible burial patterns within the collected data are observable through a digital medium. The data and maps produced using the GNSS receiver created a very different experience of interacting with a cemetery than physically moving through a site, and there do seem to be patterns only visible with a broader perspective. Using the

historical context provided in Chapter 3 of this thesis and the theoretical framework established in Chapter 2, interpreting the data collected through the grave and grave marker inventories allows the potential identification of unmarked graves and can track a site's use over time. The sites that have only undergone the baseline survey serve more to document current site conditions rather than discern burial patterns. Both levels of the cemetery survey serve different purposes but do not provide the same level of digital access to a site that would be experienced in person and thus must be discussed differently.

The final chapter discusses conclusions drawn through the writing of this thesis. The history of burial practices in Virginia can be observed in each cemetery discussed in this thesis, regardless of the level of detail collected during the field survey. Each cemetery contains elements visible through the broader perspective available through the digital representation of these spaces and will be discussed throughout this chapter. This chapter will culminate in possible future research that may benefit from the methods and results discussed in this thesis and contribute to the preservation and understanding of cemeteries and land use patterns seen across Fairfax County from the 17th through the 20th centuries.

Chapter 2: Theory of Geographic Information Systems in Deathscapes; Phenomenology and Technology

GIS and Archaeological Theory

GIS plays a vital role in documenting, analyzing, and sharing archaeological information (perhaps to a lesser degree beyond gray literature), including cemeteries. This thesis will document the methodologies used to survey and document cemeteries within Fairfax County as developed by the ACB and determine if the results allow for the use of a phenomenological approach to interpreting cultural patterns in a digital landscape. This chapter will discuss the use of GIS within the development and advancement of archaeological theory, as well as explore critiques of its use in the interpretation of cultural data.

Archaeologists have utilized GIS and other digital mapping technologies since their inception in the 1960s. For just as long, GIS has been the subject of debate regarding the extent to which it can formulate or advance archaeological theory (Allen et al. 1990; Hu 2012). A better question to debate is how GIS can support archaeological theory and practice and how data collected can be used to promote and protect archaeological sites, including cemeteries. Even in the 1990s, GIS was recognized as a database tool for managing archaeological data and as a system for processing and presenting data (Maschner 1996: 12; Verhagen 2017). Today, GIS is a prominent and powerful tool widely used in analyzing spatial data, cultural landscapes, and, though not supported by all, theoretical analysis (Hu 2012; Kwan 2004; Maschner 1996). Historically there has been some fear and criticism that GIS “representations substitute subjective reality with an objective one” (Hacıgüzeller 2012; Verhagen 2017), where natural landscape elements can be prioritized over culture (Thomas 2004: 198-201). There is a notion that GIS-based archaeological data can only be representational, and those representations of cultural data can only produce partial knowledge of a space. Due to this determination, some have concluded

that environmental properties like topography, soils, and vegetation spatial data are valued over cultural data as only ‘partial knowledge,’ creating a separation between the interpreter and the interpretation of archaeological data (Hacıgüzeller 2012). However, these criticisms have not impeded many archaeologists and anthropologists from initiating a productive relationship with the advancing geospatial technologies developed today.

GIS offers a method to gather and analyze spatial data in ways beyond what traditional maps allow. This technology enables the creation of complex relationships from both vector data (points, lines, and polygons) and raster data (imagery created with pixels), while offering users the ability to create interactive and accessible layers of detailed information (Hu 2012).

Archaeologists have found creative ways to utilize this technology for data management, spatial analysis, and predictive modeling. Despite divisive opinions on the limitations of GIS for archaeological field work, the fact remains that it has become an inescapable part of archaeological site recordation and a requirement for site reports in many states. Users of this software have also found GIS ideal for landscape archaeology and phenomenological approaches to landscapes (Daly and Lock 2004; Hu 2012).

This interpretation of phenomenology for archaeological theory was made popular by British archaeologist Christopher Tilley, whose work centers around postprocessual archaeology of pre-modern sites. In Tilley’s 1994 publication entitled, *A Phenomenology of Landscape: Places, Paths, and Monuments*, he describes this approach as a method of inquiry that seeks to humanize the study of landscapes through a sensory experience and ultimately rejects the idea that established social law, economic law, or predictive modeling can produce a bodily understanding or knowledge of the past typically used in pre-colonial archaeology (Barrett and Ilhong 2009; Tilley 1994; Tilley 2004). Tilley’s critiques of the practical applications of GIS in an anthropological setting can be summarized as such:

Ancient stones in landscapes ... cannot be known or understood simply from publications, from maps, diagrams, photographs and descriptions, because these are only representations. As representations they necessarily fail in conveying a bodily understanding of prehistoric remains. *Statistical analysis, Geographical Information Systems and simulations are, if anything, far worse*. There can be no substitute for the human experience of place – of being there (Tilley 2004: 218).

Though Tilley's opinions are prominently featured throughout his publications, his critiques have not dissuaded others from finding value in GIS. Others have re-adapted the basic principles of phenomenology to utilize GIS as a way to legitimize and quantify the ephemeral nature of this approach (Gillings 2012; Hacıgüzeller 2012; Johnson 2012). In addition, GIS practitioners have argued that further technological advancement and methodological improvements will bridge this theoretical gap in spatial data interpretation (Hacıgüzeller 2012; Verhagen 2017), while some archaeologists contend that only landscape-based approaches can fully harness the full potential of GIS and advance archaeological theory (Green 1990b; Hu 2012).

Phenomenology seeks to humanize the study of landscapes; its essence is better understood by what it opposes rather than its core principles. Phenomenology rejects the processual model and a strictly scientific methodological process of archaeology. As defined by Tilley, it seems to be the antithesis of using GIS to study landscapes (Barrett and Ilhong 2009; Tilley 1994). However, Tilley's ideas were formed in the 1990s when GIS technology was limited in computing capabilities with significantly fewer users employing spatial data to model aspects of the human experience in the field. More recent definitions of phenomenology emphasize the understanding of 'experience' and its inherent connection to philosophy as well as anthropology rather than focus on the limitations of technology in this understanding. One such definition provided by Bernhard Leisle highlights this connection and describes a common

misconception that phenomenology is a first-person description of the human experience when it is a “systematic inquiry into the structures and processes of experience and their philosophical significance” (Leistle 2022). Another description of the theory comes from Jarrett Zigon and Jason Throop’s 2021 paper titled *Phenomenology*, in which they discuss the evolution of the theory over the last century, provides cultural anthropologists with conceptual resources to interpret how humans are relationally intertwined and analyze and understand the complex human, or non-human, experience (Zigon and Throop 2021).

Some have argued that GIS is ideal for analyzing social and ritual landscapes that consider environmental and economic factors that physically impact the environments people occupy (Hu 2012; Wheatley 1993). Agent-based modeling can be used to show the human experience and “how actions by individuals combine to produce global patterns, provide a convenient framework for developing quantitative models of historical social processes” (Romanowska et al. 2017: 178). It must be acknowledged that researchers approach any agent-based model with the understanding that societies are ever-changing and be aware of the limitations of these models regarding human decision-making (Romanowska et al. 2017: 180). In Mei-Po Kwan’s 2004 paper *Beyond Difference: From Canonical Geography to Hybrid Geographies*, the idea of accounting for and embracing the effect GIS can have on archaeological research is discussed at length. There is hope for a fruitful relationship between other forms of archaeological knowledge and those created through technology; a hybrid approach that seeks to repair the growing rift between physical and human geography (Kwan 2004: 756; Hacıgüzeller 2012).

A common hybrid practice for utilizing GIS to further archaeological theory is through the use of quantitative methods to address issues informed by critical geographies. Which is defined as the idea that humanity can potentially transform their environment and how social, economic, class, and political factors must be accounted for in the study of landscapes (Cannon

and Simpson 2018). Alternatively, others will employ a qualitative understanding of the lived experience of individuals in various cultural contexts (Kwan 2004: 758) to explore the experiential affordances of landscapes, events, and features. Mark Gillings 2012 paper, *Landscape Phenomenology, GIS and the Role of Affordance*, provides an example of using GIS to understand the relationship between a flooding river and a community living on the floodplain. GIS can be used to map the potentially flooded area, but this does not consider the complex relationship between the community and the seasonal flooding river (Gillings 2012). Finding ways to incorporate the human experience into quantifiable data may not be possible in every scenario, but to dismiss GIS entirely limits researchers from uncovering patterns that may remain unseen without a visual, spatial, or temporal context within geospatial data (Gregory et al. 2001; Diserens 2012).

A hybrid approach to GIS within the study of cultural landscapes can allow for the organization and interpretation of methods available through technology while retaining the ideologies of a more phenomenological approach to archaeology. As Herbert Maschner said in this 1992 paper *Geographic Information Systems in Archaeology*, “Archaeologists need to be reassured that it is scientifically legitimate to discover patterns in the data through exploratory data analysis. It is satisfactory, and sometimes enlightening, to simply use statistical and graphical routines to identify patterns in the archaeological record that can provide the basis for further deductive inquiry” (5-6). GIS is not necessarily a source of archaeological theory by itself; it, however, serves as a tool to advance and substantiate archaeological theory. It can offer quantifiable support for concepts as esoteric as phenomenology or as studied as the evolution of cultural landscapes.

GIS and Theory in Cemetery Surveys

The theory of phenomenology is applicable in GIS-based surveys, as demonstrated in the survey of Adelaide’s West Terrace Cemetery in Adelaide, Australia. In 2015, Stephen Muller

documented the application of a phenomenological approach to consider trends supported by archaeological evidence and available historical documentation. He determined that spatial design was influenced by functional and ideological factors that communicate the experience of the cemetery landscape. Muller's work was completed in stages by utilizing pedestrian survey methods to identify and document burial sites and GIS spatial data to identify any patterns of use across the site that coincide with historical documentation of 19th-century burial activity. The conclusions of this experiment indicate that a phenomenological landscape approach for historic cemeteries could be applicable to other historic sites and landscapes.

The data obtained from the samples in relation to spatial layout, burial positioning, monument form and style demonstrates how regulated and important the process of visitation was in the Victorian-era cemetery, and confirms that these layers of meaning, communication, and experience remain embedded and potentially interpretable from the surviving archaeological landscape (Muller 2015: 25).

There are other examples of GIS-based cemetery surveys that do not place emphasis on a phenomenological approach but rather the intent to understand and document the cultural landscape of a cemetery. Though the methodologies are different, each survey strives to find the best and most practical approach for each cemetery, contingent on project funding and technology available at the time of the survey.

For example, the mapping of the historic St. Michael's Cemetery in Pensacola, Florida, in the early 2000s tested the feasibility of using GIS-based mapping with detailed grave attributes to take inventory of, analyze, and manage historic cemeteries. Furthermore, researchers evaluated the usability of an internet-accessible GIS map format designed for both the general public and the scientific community (Liebens 2003: 57). Similarly, the St. Louis Number Two Cemetery in New Orleans, Louisiana underwent a survey in 2012 with a goal to determine best practices for

documenting a historic cemetery when utilizing GIS as a part of the initial approach to the fieldwork (Diserens 2012: 16-17).

From 2013 through 2020, the East End Cemetery in Richmond, Virginia, presented a situation where volunteers with the Friends of East End Cemetery (FOEE) worked for seven years to clean and document grave sites and transcribe grave markers (Palmer 2021). Aerial imagery and drones were used to document the site. ESRI's ArcGIS Pro was used to produce maps and confirm the locations of visible grave depressions and markers as noted by FOEE volunteers. This type of documentation was done to create an interactive map available to the public for research purposes, provide historical context to the site, and document any notable vandalism or degradation of the site as had been previously noted (Spera et al. 2022). Using GIS to monitor the site conditions offers opportunities for continued observation of the changing cultural landscape and provides a map indicating unmarked grave depressions that could have otherwise been overlooked and possibly put at risk through further neglect.

The study of cultural landscapes of cemeteries presents in a number of ways across the world. However, no two surveys are exactly the same; the variation in documentation style and approach to incorporating GIS spatial data changes depending on several stated factors and intentions of what will be done with the data collected. For example, some have discussed making data available to a wider audience for use in genealogical studies, management, and preservation of these sites. In contrast, other studies focus on the technical methodologies needed to compile data accurately, albeit occasionally selectively. For a final case study, St. John's Cemetery in Maryville, Illinois, was surveyed utilizing GIS to analyze the cemetery landscape. The results provided evidence of gravestone morphology similar temporal evaluation comparable to other parts of the county and contributed to the understanding of historic Midwestern cultural landscapes (Pristolas 2017: 73). Using GIS to identify burial patterns in these spaces requires an

understanding of cemetery landscapes and the social, cultural, spiritual, and economic factors in place that would have contributed to its development and (possible) neglect over time.

Cemeteries have always been a vital cultural resource within communities worldwide, reflecting the cultural practices, community practices, economic status, and religious traditions of those interred. Understanding cemetery landscapes is vital to the understanding and interpretation of the cultural landscapes of these communities. Therefore, clear and accurate documentation of these sites is necessary and made possible through modern geospatial technology. These sites are likely more vulnerable to urban development and neglect without well-defined and documented boundaries. This thesis will outline the methods Fairfax County's Archaeology and Collections Branch (ACB) developed to survey and document historic cemeteries and determine whether these methods support using a phenomenological approach for interpreting cultural patterns in a digital landscape. Of the 363 cemeteries included in this survey, three will be explored throughout this thesis to discern their historical context within the county and analyze the data gathered from on-site visits.

Chapter 3: Historical Context for Cemeteries of Fairfax County

Fairfax County Cemetery Survey

Cemeteries are a fragile and vulnerable resource, holding immense cultural significance for descendants, local communities, and researchers alike. These spaces remain physical reminders of the past in an ever-developing modern landscape. This chapter will highlight three of the 363 cemeteries included in the ACB's cemetery survey, including the Peake Family Cemetery (003), Fairfax County Cemetery (172), and the Brown-Wheeler Cemetery (009), which illustrate the array of resources and proximity to urban development and demonstrate different historical contexts within Fairfax County. When accurately documented with current technology like GIS, the data collected in this survey or others like it can provide access to these spaces even if one cannot be physically present. The ACB's current survey is an effort to reconcile and reevaluate the current state of cemetery documentation in the county to protect these spaces from further urban development pressure.

Cemeteries are a protected resource under Virginia law §18.2-127, stating that individuals who willfully damage the contents of a cemetery or burial ground are guilty of a class 1 misdemeanor, but deterrents like this cannot be enforced when a cemetery is "unmapped and forgotten" (Rainville 2009: 200). The discussion in this chapter will provide additional information about those interred in these cemeteries, local historical context, and any cultural practices previously identified in background research. This chapter will not directly compare sites as the cemeteries vary in size, age, condition, current documentation, religious affiliation, ownership, and represent a small portion of a much larger dataset. Understanding the known context of these spaces will provide a stronger foundation for discussing survey findings using a phenomenological approach in subsequent chapters.

Documentation of historic sites in the Commonwealth of Virginia gained popularity in the 1930s with the Virginia Historical Inventory, an archive created by the Virginia Writers' Project as an offshoot of the Work Projects Administration (WPA) (Library of Virginia 2003; National Archives 1995). A 1935 executive order under President Franklin Delano Roosevelt established the WPA as a New Deal-era work relief program designed to reinvigorate the workforce in the wake of the Great Depression (Deeben 2012). The Virginia Historical Inventory today consists of over 25,000 survey reports, photographs, maps, and other records documenting Virginia's cultural resources and was used to stimulate cultural tourism in the Commonwealth. This inventory has documented historical landmarks, vernacular architecture, and cemeteries, among other resources across Fairfax County. However, at its inception, emphasis was placed on surveying everyday architecture built before 1860 rather than burial spaces (Library of Virginia 2003; 2022). These records offer researchers invaluable access to many sites as they existed in early 20th-century Northern Virginia; an updated examination of these spaces can provide information regarding the development of a changing urban landscape.

Modern documentation of cemeteries in Fairfax County began in 1977 with the work of historian Jane Kirkpatrick-Wall, who provided a document to the Fairfax County Public Library (FCPL) containing headstone transcriptions from 100 Fairfax County cemeteries. Her work was expanded upon for the next 15 years by library staff and volunteers until the Fairfax County Board of Supervisors requested that the county records of cemeteries be updated and made available to researchers. Brian Conley, a historian and archivist with the FCPL, compiled his manuscript *Cemeteries of Fairfax County, Virginia*, containing updated information and a reference guide for over 360 cemeteries in 1994 (Conley 1994; FCPL 2023; Wells et al. 2021). The majority of the research discussed within this chapter has been compiled from the Virginia Room of the FCPL, the Archaeology and Collections branch files, and state records. The number

convention Conley used in his manuscript to reference each site is used in Fairfax's survey as a reference number and an identifier.

A Brief History of the Settlement of Fairfax County

The history of human occupation in northern Virginia stretches back thousands of years to the end of the Pleistocene epoch, with Europeans arriving by the early seventeenth century (Pettitt and Mayes 2012). The colonial period saw extensive periods of growth beginning in 1649, when King Charles II of England granted over five million acres of Native land extending between the Rappahannock and Potomac rivers to English settlers (Sweig 1978: 6). Settlement and landscape development across seventeenth and eighteenth-century Tidewater, Virginia, was driven and dominated by tobacco plantations and spread north across the region. Though demand drove an increase in tobacco production, populations were typically sparse and widely dispersed as land grants tended to be large to accommodate the crop; fewer than 100,000 people lived across Virginia by 1700 (Netherton et al. 1978:12; Wells 1997). Though religion was an active part of colonial life, the nature of plantation-based settlements led to the practice of small family burials in local communities rather than churchyard burials, as was typically seen in smaller Northern communities and England (Crowell 1986; Issacs 1982; Wells 1997).

Fairfax County, formally established in 1742 from a portion of Prince William County and named for Lord Thomas Fairfax (Gannett 1905: 123; Historical Society of Fairfax County 2023), also reflected these burial practices. The great distance between churches and even one's neighbors led to the insular practice of family cemeteries, and what began out of necessity became a common occurrence and eventually tradition in rural communities of Early America by the mid-eighteenth century (Crowell 1986; Issacs 1982; Wells 1997). As noted by Reverend Hugh Jones, "The Parishes being of great Extent...many dead Corpses cannot be conveyed to the Church to be buried; so that it is customary to bury in Gardens or Orchards, where whole Families lye interred together" (Jones 1724:96-97). Churchyard burials were still present

throughout this period, though they served small local communities rather than acting as a destination for the wider region. From the eighteenth into the nineteenth centuries, tobacco plantations caused the land to lose much of its vitality; large plantations were subdivided as more people moved into the region, and farms moved further west in Fairfax County (Isaac 1982; Wells 1997). Improved transportation throughout the eighteenth century drove new settlement patterns across the region, giving rise to choices between the “custom of plantation burial and the religiously preferred option of burial at the church. Even with the increase in the number of churches throughout the eighteenth century, plantation burial remained popular” (Crowell 1986: 27). By the Nineteenth century, Fairfax County became more centrally focused on farming villages and towns became the hub of trade rather than the widely dispersed settlement patterns seen throughout the previous 100 years of colonial occupation (Isaac 1982; Wells 1997).

Churchyard burial practices fluctuated between the mid-eighteenth and early nineteenth centuries. Communities developed into small municipalities and trade towns, and more churches were established, giving access to religious-based burial practices on a broader scale than had been possible in the previous century (Conley 1994; Wells 1997). Nevertheless, as towns grew throughout Fairfax County, legislation that would restrict or completely prohibit municipal burials within town limits was introduced. In 1809, the town of Alexandria became one of the first in the county to pass a law prohibiting burials within the town limits. By 1876, Fairfax County and the rest of Virginia followed suit to Alexandria’s legislation, and a general ban was enacted on intramural burials across the Commonwealth (Acts and Joint Resolutions Passed by the General Assembly of the State of Virginia at the Session of 1875-76:38; Wells 1997). Moving into the 20th century, most burials within Fairfax County have occurred in “large, corporately owned and perpetually maintained cemeteries located outside city limits” (Wells 1997). These spaces, known as lawn cemeteries, became the norm for Virginian burials and can be seen across the country during this period (Coffin 1976; Mitford 1963; Wells 1997). Population growth,

economic development, and legislation permanently altered the landscape of Fairfax County, but early occupational patterns remain visible. Remnants of this local history can be found throughout the region's cemeteries; they are a wealth of information and provide direct ties to the past and those who lived it.

Peake Family Cemetery (003)

The Peake Family Cemetery (003), located in Martin Luther King Jr. Park, was acquired by the FCPA in 1977. This cemetery is the original family burial ground of William Peake, who purchased 250 acres in the Hunting Creek area prior to 1732. The Peake Family were potentially the first white landowners to occupy their plantation near Hunting Creek and had ties to both the Washington and Mason Families due to their close proximity (Snowden 1903). In 1829, Dr. Humphrey Peake lost the farm due to bankruptcy, and the property was divided and sold to the freed slaves of the Peake, Mason, and Washington families, including West Ford (Conley 1994), a prominent figure in the area. "The last Peake burial was in 1805, but the African-American residents of the area continued to use the cemetery into the 20th century" (Conley 1994; Department of Planning and Development 2007). Though this is no longer an active burial ground, the occupants of Peake Family Cemetery (003) have significant ties to this region and have garnered the attention of the local community and historians alike.

The Peake Family Cemetery (003) sits within the historic community of Gum Springs, founded in the 1830s by West Ford, a Black man who was freed from enslavement in 1805 at the age of 21 (Hollis 2018). Ford grew up on the Bushfield Plantation in Westmoreland County, Virginia, the property owned by George Washington's Brother, John Augustine Washington, and his wife, Hannah Bushrod Washington. In 1802, Ford moved to the Mount Vernon estate when Bushrod Washington, son of Hannah and John, became the property's new owner. Ford was granted his freedom by 1805 but continued to work for the Washington Family. Upon Bushrod's death, Ford received 100 acres of land in Fairfax County. Soon after, he sold that land and

purchased 244 acres in the area that would become Gum Springs, later to become a free black community (Jones 2019; Thompson 2023). Two of Ford's descendants are among those buried in the Peake Family Cemetery (003), William Dandridge Smith and Annie Smith, buried in 1906 and 1907, respectively (Conley 1994; Hollis 2018).

The condition of this cemetery has been well documented throughout the years. It has been previously surveyed by members of the Daughters of the American Revolution (DAR) in 1973, 1979, and again in 1988 (Fairfax Genealogical Society 1988). In a 1968 memorandum, the cemetery was noted as the "Humphrey Peake Cemetery" (Executive Director 1968). It was noted that heavy machinery was used to clear a portion of the cemetery and disturb at least one headstone and multiple trees, and private citizens expressed concern over the damage. The cemetery was not fenced, but FCPA placed four wooden boundary markers to demarcate the cemetery and later repair the damaged stone (Executive Director 1968). Nearly twenty years later, in a 1986 letter from a descendant of the Peake Family to the Park Authority, James Boulden expressed his concern for the state of the cemetery. There was still no fence protecting the site and were clear signs of neglect (Boulden 1986; 2009) (Figure 2).

The FCPA fenced the cemetery in 1989, and it was noted to contain "9 gravestones and an undetermined number of unmarked graves" (Fairfax County Department of Planning and Development 2007). Fieldstones were also noted to have been both head and foot markers, but as the site was unbounded for so many years, they have likely been moved from their original locations, if they remain at all. The Peake Family Cemetery (003) has not been active in the last hundred years, but the area's history is reflected in the identity of those buried within, providing a unique view into a landscape that transitioned from an eighteenth-century tobacco plantation to the vibrant and free black community of Gum Springs.



Figure 2: Peak Family Cemetery circa 1980s, photo scanned and housed in the Virginia Room of the FCPL cemetery file 003.

Fairfax County Cemetery (172)

The Fairfax County Cemetery (172) is owned and maintained by the Fairfax County BOS. Located off Jermantown Road in Fairfax, Virginia, this area was once an isolated and largely forested region of the county. Today, the cemetery is surrounded by a county vehicle maintenance facility and suburban housing developments. The transformation of Route 66 has reshaped the landscape over the past 50 years contributing to population growth and expanded suburban housing seen in the area around this cemetery. However, despite new developments and urbanization, the original purpose of the Fairfax County Cemetery (172) remains unchanged. This cemetery was established in 1946 under the name Potter's Field and was created as a burial site for the unidentified or indigent (Lopez 1976; Sager 1983). The term "indigent" is legally defined in the Commonwealth of Virginia as "a person who (i) is eligible for or receiving state-funded or federally-funded public assistance benefits whose eligibility for such benefits is based in whole or part upon an evaluation of their income against federal poverty guidelines" (Virginia's Legislative Information System 2021). Among the first buried on this site in 1946 are five

Figure 3: Scan of the plot map of Potter's Field now known as Fairfax County Cemetery (172), housed in the Virginia Room of the FCPL, Fairfax County, Virginia, Department of Public Works Office of Capital Facilities



By 1963, 43 people were buried in the cemetery, yet the area remained unfenced, unmarked, and poorly maintained. Local clergymen performing the burial services voiced complaints about the muddy, uneven terrain and a lack of grave markers. Each grave was noted to be “marked by flowers in a pop bottle” (Lopez 1969) rather than formal engraved stones. As the poor condition of Potter’s Field was made known to the local community, Fairfax County rededicated the site as Fairfax County Cemetery in 1969. From this point on, granite headstone markers replaced the informal pop bottles; an order for 28 “granite markers 8” x 5” x 6” polish top lettered” costing \$15 a piece was placed in the year before the rededication (Kline 1968). Following improvised maintenance, a new fence was installed, and local residents planted azalea bushes along the perimeter of the site (Sager 1983) (Figures 3 and 4). By 1983, 149 persons were buried here, continuing to be a place for unidentified individuals or those who could not afford burial elsewhere until the cemetery reached its maximum capacity of 230 persons in 1992 (Cella 2005).

Fairfax County Department of Family Services began contracting local private funeral homes to help with the burial services in the 1980s. The department’s director, Barbra Antley, has stated that, “they try to look at what the deceased would have wanted, if it is unknown, we do a burial. We want to be respectful of the descendants’ wishes and background” (Cella 2005). Religious observances are written into the county’s contract for funerary services, meaning each service was tailored to the deceased when known and abstained when not. A documented example of these observations can be seen in a portion of the cemetery dedicated to those who practice Islam; the burials are oriented East (Cella 2005; Jacks 2006; Tubque 2007). In other examples, some graves are bound with stones and covered in gravel. Today, the Fairfax County Cemetery is no longer active, but it remains under the care and responsibility of the County BOS.



Figure 4: Photograph of the Fairfax County Cemetery taken by James A. Parcell, originally published in Mike Sager's 1983 Washington Post article, "POTTER'S FIELD, Fairfax County's Dreary Graveyard for the Destitute, Adrift or Anonymous", scanned and housed in the Virginia Room of the FCPL cemetery file 172.

Brown-Wheeler Cemetery (009)

Located off Leesburg Pike in Herndon, Virginia, the Brown-Wheeler Cemetery was first established as the Brown Family Cemetery in the early 1850s. The original 320-acre tract of land the cemetery resides on was purchased by Reverend Jesse Brown and Reverend Augustus Brown in 1850 from a man named Hach (Thrall 1990). The site has been recorded under multiple names throughout the years; a 1936 WPA historic inventory lists the area as the Anna Dunham Graveyard (McMullen 1936). At the time, Anna was claimed to be the only visible name on a grave marker. However, three fieldstones are inscribed with the previous landowner's name, Hach (Thrall 1990), indicating that this area was already used as a burial ground before Brown's acquisition and Anna's death in 1854 (Conley 1994). Not much is known of these three graves, but they have been theorized to belong to three children of the Hach family who were buried on the site before 1850 (Thrall 1990), though this is not confirmed.

The Brown's established themselves in the local community throughout the next twenty years. In 1874, Reverend Augustus Brown and his wife Sarah deeded a one-half acre of their property to the Methodist Episcopal Church trustees to build a new chapel on the land. Brown and his two sons, Joe and Irving, constructed the building on what is now the corner of Leesburg Pike and Baron Cameron Avenue. The Chapel held an active congregation until 1967, when the expansion of Leesburg Pike, also known as Route 7, threatened the structure's integrity. In 1968, the Chapel was offered to the Fairfax Historical Landmark Preservation Commission for relocation and was moved by the end of that year (Fairfax County Department of Planning and Development 2007; The Washington Post 1968:C1). Reverend Augustus Brown was buried in the Brown Family Cemetery in 1881, and the cemetery remained in the care of the Brown-Wheeler Family until 1930 (Conley 1994).

Augustus's grandson, Joseph Augustus Wheeler, and Herbert Brown deeded two acres surrounding the family cemetery to the Brown's Chapel Cemetery Association in 1930, with a 75' x 75' square centered on the hilltop reserved for the descendants of Augustus Brown and their spouses. Herbert added a fence to the extended cemetery boundary and constructed a stone wall with a large, easily recognizable arched entryway along Route 7 (Conley 1994; Thrall 1990) (Figure 5). An iron fence and a large holly tree mark the location of the remaining family plot; it is noted that most of the granite gravestones within the fence are identical to each other with contemporary designs and were placed between 1936 and 1980 rather than at the time of burial. There are other burials outside the family plot, but they are not direct family connections to the Browns or Wheelers (Conley 1994; Lipsey 2010).

This site has been documented numerous times and underwent a phase I archaeological investigation in 2015 conducted by John Milner Associates, Inc. (JMA) on behalf of the Virginia Department of Transportation (VDOT) to further widen Route 7. A shovel test pit survey and pedestrian walkover were conducted along the portion of the area of potential effect (APE) that

intersects with current site boundaries. No graves appear to have been present, and no further work is recommended based on their results (Goode and Traum 2015). It should be noted that the site boundaries as of 2015 had yet to be re-evaluated or mapped since the previous survey in 1994. The Brown's Chapel and the Brown-Wheeler Cemetery (009) are cases where expanding infrastructure has impacted community resources, and the current conditions and layout of these spaces can track the change in cultural landscapes.



Figure 5: View of the stone archway to the Brown-Wheeler Cemetery (009) from Route 7, scanned and housed in the Virginia Room of the FCPL.

Fairfax County ACB surveyed each of these cemeteries between March and October 2023. Each of these cases shows the varied cemetery landscapes across the region and are some of the few remaining physical reminders of local history. Settlement patterns are reflected in the personal histories of those buried in these spaces, and their layout and current conditions reflect

how people today interact with these spaces. The results of each survey will be discussed in Chapter 5 of this thesis. The ACB developed field methodologies for a new cemetery survey to capture the most data consistently across each site. These methods, their development, and the various phases of each survey will be discussed further in the next chapter.

Chapter 4: Cemetery Survey Methods and Data Collection

Survey Planning

Cemeteries have been documented throughout the ACB's 40-year history using various sources previously discussed in Chapter 3. The information gathered through deeds, wills, previous surveys, oral histories, church records, community member accounts, and GIS records through the VDHR's Virginia Cultural Resource Information System (VCRIS) has resulted in inconsistent site boundaries, some of which is in direct conflict with each other (Wells et al. 2021). This compiled data was reevaluated for this survey, and a GIS reference layer was created to visually represent the previously known location of each cemetery to be used as a reference point during fieldwork. Though the methodologies discussed in this chapter were not developed with this thesis in mind, the data collected using these methods will be used to interpret any known or unknown burial patterns or trends visible through the digital landscape produced by this survey.

There is no established standardization in data collection methodology for cemeteries, nor are there specific requirements for the data collected during a cemetery survey. However, generalized norms and terminology are used when discussing a cemetery within the archaeological community, and many examples of previously completed cemetery surveys show detailed examples of, as discussed in Chapter 2 of this thesis, how to collect and interpret the information collected. As no one correct method exists, researchers can tailor the data collection process to the survey's goals, project funding, and available technology. The ACB's ultimate goal, as authored by Aimee Wells, Alisa Pettitt, and Amanda Benge, is to update the location information of each cemetery and, additionally,

Provide information regarding current legal ownership, current caretakers, and a general description of the current conditions. Where feasible, headstone transcriptions may be provided as well as an estimate of any unmarked burials. This information will assist genealogical researchers, staff providing comment for development projects, homeowners and homeowners associations, and scholars studying the history of Fairfax County (Wells, Pettit, and Bengt 2021: 2).

The ACB uses a variety of sources to determine the best practices for data collection, methodologies, interpretation, and how cemetery data should be categorically understood and discussed. For best practices, texts like the Chicora Foundation's *Recording Historic Cemeteries: A Guide for Historical Societies and Genealogists* (1992), Sharon De Bartlo Carmac's *Your Guide to Cemetery Research* (2002), Matero and Peter's *Survey Methodology for the Preservation of Historic Burial Grounds and Cemeteries* (2003), and the Maryland Historic Trust's *Historic Cemeteries and Burial Grounds: Documentation & Preservation* (2007) were vital in determining a field methodology. To understand the above-ground resources of a cemetery, the ACB turned to sources like Dethlefsen and Deetz's *Death's Head, Cherubs, and Willow Trees: Experimental Archaeology in Colonial Cemeteries* (1966), Deetz's later work *In Small Things Forgotten* (1977), Elizabeth Crowell's "*They Lie Interred Together*": *An Analysis of Gravestones and Burial Patterns in Colonial Tidewater Virginia*, and Douglas Keister's *Stories in Stone: A Field Guide to Cemetery Symbolism and Iconography* (2004).

A field strategy was developed using these sources to work within our existing fieldwork methodology for digital data collection while utilizing ESRI's Field Maps application on a tablet and an EOS Arrow Gold GNSS receiver. All data used in this thesis was collected during the ACB's official cemetery survey, and all technology used in the data collection and analysis is owned by the ACB. This device allows for high-accuracy (at its best, sub-centimeter) locational information to be collected from these sites. It allows detailed and accurate cemetery boundaries

to be documented and compared to the previously identified locations. The spatial distribution of graves and markers within cemeteries and landscapes is essential to understanding burial patterns and traditions as reflected by the societal norms of the time. Using technology to record and analyze these distributions can change how archaeologists identify patterns within deathscapes and help to preserve these spaces.

Field Methods

Archaeologists typically work in teams of two to complete each field survey and will later review all new data in the lab to ensure no errors remain in the finalized field results. Three digital field forms were developed for the cemetery survey using ESRI's Field Maps application to record all significant aspects of a cemetery: cemetery boundaries, markers, also referred to as grave markers, and graves. The cemetery boundary layer is used to record the overall boundaries of a site as a polygon in the digital map, and the baseline cemetery survey form is attached to the shape and completed in the field. The grave and marker layers are point layers that capture a single Global Positioning System (GPS) point in the digital maps, each with a corresponding form to record the grave and marker inventory information separately. A fourth additional layer records information in particular circumstances; any notable surface features are recorded as polygons with a corresponding form attached. These features include fencing, landscape design elements, garden beds, additional grave information, and any depressions not associated with an identifiable marker indicating burial activity.

Each digital form collects different data types, but not all are used for each cemetery survey. ACB established two levels of investigation to differentiate the level of detail recorded: the baseline cemetery survey and an inventory of individual graves and markers. These two levels were developed to account for several factors limiting the data collected for some sites included in the survey (Wells et al. 2021). Of the 363 cemeteries, only 43 are owned or managed by the Fairfax County Park Authority or County Board of Supervisors; of the remaining 320 sites, the

ACB focuses primarily on recording the cemetery boundaries and general condition rather than individual grave sites.

The minimum amount of data needed to complete the overarching goals of this project is designed to be completed through the baseline cemetery survey form. Individual grave and marker inventories are complete when possible, but Fairfax's sheer number of burial sites is a limiting factor in its own right. Some sites lack clear ownership, some are privately owned and thoroughly documented, and others ACB has not been granted permission to survey. Of the three cemeteries discussed in this thesis, the Peake Family Cemetery (003) and Fairfax County Cemetery (172) underwent both baseline cemetery surveys and the inventory of graves and markers as they are owned and maintained by the county. The Brown-Wheeler Cemetery (009) only underwent the baseline cemetery survey for a few reasons. The first is that it is owned and maintained by the Brown's Chapel Cemetery Association and Reverend R.O. Henley (Conley 1994). The second is that though this site is somewhat of an outlier within this thesis, in the larger context of the ACB's cemetery survey, the Brown-Wheeler cemetery received the most common form of documentation with the baseline survey, and the Peake and Fairfax County Cemeteries are some of the few that underwent the second phase of documentation. An individual grave and marker inventory may be completed for this site in the future, however, the site is well documented and was not determined to be necessary at the time this thesis was written.

Baseline Cemetery Survey

The cemetery survey fieldwork begins with determining and recording site boundaries, which, at times, can be challenging to identify. Pedestrian reconnaissance, defined as systematic visual inspection of a specified area (Virginia Department of Historic Resources 2017; Wells and Pettit 2023), is the primary investigation method in determining site boundaries not well-defined by fencing or landscape features. ACB archaeologists systematically walk along the pedestrian reconnaissance grid, beginning in the southwestern corner and moving in an eastern direction

across the observable cemetery. Archaeologists use flags or brightly colored cones to mark any obvious graves, markers, or landscape features (natural or otherwise) that visually indicate the end of burial activity. Once the area has been visually checked and the site's perimeter has been established by flagging all cemetery features, the boundary is recorded using the EOS Arrow Gold GNSS receiver in the Field Maps application on a tablet. GPS points are taken along the boundary, creating a polygon to which the cemetery survey form will be attached. Archaeologists are responsible for populating some fields within the form while in the field and taking a series of photographs to record the site in all cardinal directions, fencing, boundary markers, interpretive signs, and an entryway to the site (if applicable). Other information will be entered during the project review while in the lab to ensure the information has been entered correctly in the field.

The cemetery survey form consists of fields to enter information and descriptors directly into the Field Maps Application; these will be briefly discussed in Table 1. These fields are used to answer questions regarding the cemetery's location, ownership, name, conditions, known threats, grave marker condition, activity status, and any further notes by the archaeologist completing the survey.

Table 1: Summary of Cemetery Survey Form, developed by ACB archaeologists (Wells and Pettitt 2023).

Field Name	Information to be entered by archaeologists	Location Entered
Investigators and Survey Date	Name of those completing cemetery survey and date of survey	Field
Cemetery Address	If known, street address for cemetery	Field
Additional Location Information	Any additional information on how to locate the cemetery	Field
Conley Cemetery Name and Number	Name and Number identifier of cemetery as identified during Brian Conley's 1994 Cemetery Survey, referenced in his work <i>Cemeteries of Fairfax County</i> . Ex: Peake Family Cemetery 003	Field
Cemetery Parcel Identifier	Identification number from Department of Tax Administration records	Lab

Cemetery Owner Address	Address of current owner as recorded in Fairfax County tax records	Lab
Disputed Ownership and Citation	Used to indicate if ownership of a cemetery is disputed or not, otherwise recorded as not applicable or unknown. If disputed, deed book and page number of last clear legal transfer of cemetery or deed reserving cemetery in perpetuity	Lab
Site State Identifier - Archaeological and Architectural	Site number as provided by VDHR if applicable	Lab
Cemetery Boundaries - Defined	Used to denote if there are well-defined boundaries of a cemetery, including fencing, landscape features, or parcel boundaries, or not well-defined boundaries. Does not reflect if delineation of a site has occurred, only visual site features.	Field
Cemetery Conditions and Description	How well cared for the cemetery is, or if there is no indication of a cemetery still existing in the noted location	Field
Cemetery Conditions - Markers	General condition of head or footstone markers in cemetery	Field
Cemetery Type	Used to indicate the presence of marker or unmarked graves in the cemetery	Field
Cemetery Threats	Used to identify the primary threat to the cemetery including development, natural, neglect, vandalism, other, or no known threats	Field
Status	Used to indicate if the cemetery is active, or contains marked burials within the last ten years	Field
Inscriptions	Used to indicate if and what type of inscriptions are on markers in the cemetery	Field
Ethnic Affiliation	Used to describe the ethnic affiliation of those interred if known	Lab
Summary	Used by archaeologists to make notes on cemetery features not addressed in other fields	Field
Recommendations	Used by archaeologists to make recommendations for further study, general maintenance, conservation care, and clean-up	Field

Graves and Grave Marker Inventory

The baseline cemetery survey will always be recorded before a grave marker and grave inventory are completed. Graves and markers are recorded using the same methodology as the baseline cemetery survey, and just as boundaries are determined through pedestrian reconnaissance, graves and grave markers are as well. ACB archaeologists systematically survey

the surface area of the observable cemetery and use flags or cones to mark grave markers, headstones, footstones, suspected field stones, and obvious graves. GPS points are taken using the EOS Arrow Gold receiver and ESRI Field Maps application on a tablet, just as with the baseline cemetery survey. Individual GPS points are taken individually for each grave at the best-determined center point of the visible burial; if there is no apparent depression, this will be noted in the form. Grave markers also have separate individual points taken from the center point of the marker's eastern face. Archaeologists will record each marked grave and marker as appropriate and will complete the corresponding inventory form. Photographs of each marker are included as well, but graves do not need to be photographed unless determined necessary for condition descriptions or visible damage.

The individual grave inventory form is structured like the baseline cemetery form, providing context for the cemetery where the grave resides, conditions, and if the identity of those interred is known. A brief description of these fields is discussed in Table 2. The form created for recording grave markers is slightly more in-depth. It is structured to reflect the general terminology, iconography, and other identifiers used to broadly describe cemetery features as discussed in the works of the Chicora Foundation (1998), Dethlefsen and Deetz (1966), Deetz (1977), and Keister (2004). Most information collected during these inventories is completed in the field, but analysis of field results and entry of certain fields are completed in the lab, including associated address and ownership information. A brief description of the fields included on the grave marker form is discussed in Table 3.

The early days of this survey were used to test these methodologies, and it was determined that it was too time-consuming to complete transcriptions of each grave marker while in the field. The tablets being used were difficult to type on, and there was a greater likelihood of information being recorded incorrectly and inconsistently. These transcriptions are now completed in the lab from photographs taken in the field of the markers and records and written

information on markers of any kind, including headstones and footstones. ACB archaeologists take detailed photographs of each recorded marker in the field and attach them to each digital form to complete transcriptions and record the current conditions of each stone. This process ensures the stone is documented digitally with all other data collected during this survey. These photographs are also used to relocate a marker that may be inaccessible during certain months of the year due to vegetation.

Table 2: Summary of fields used in Grave Inventory form, developed by ACB archaeologists (Wells and Pettitt 2023).

Field Name	Information to be entered by archaeologists	Location Entered
Investigator Name and Survey Date	Name of those completing cemetery survey and date of survey	Field
Conley Cemetery Name and Number	Name and Number identifier of cemetery as identified during Brian Conley's 1994 Cemetery Survey, referenced in his work <i>Cemeteries of Fairfax County</i> . Ex: Peake Family Cemetery 003	Field
Known Individual?	Indicates whether the individual interred is known or not	Field
Marked?	Indicates whether the grave is marked, and by what category of marker, ie. engraved, fieldstone, group monument, unmarked or unclear	Field
Notes	Used by surveying archaeologists to note more information regarding grave conditions, or the presence of a grave depression, or lack thereof	Field

Table 3: Summary of fields used in Grave Marker Inventory form, developed by ACB archaeologists (Wells and Pettitt 2023).

Field Name	Information to be entered by archaeologists	Location Entered
Investigator Name and Survey Date	Name of those completing cemetery survey and date of survey	Field
Conley Cemetery Name and Number	Name and Number identifier of cemetery as identified during Brian Conley's 1994 Cemetery Survey, referenced in his work <i>Cemeteries of Fairfax County</i> . Ex: Peake Family Cemetery 003	Field
Marker Type	Used to indicate if a marker is a headstone, footstone, group memorial, or unknown if it is unclear	Field

Marker Notes	Used by Archaeologists to note identifying features about the grave or the individual that will assist further identification and transcription at a later date	Field
Marker Condition	Used to determine the condition of the marker, how legible it is, if it is weathered, broken, missing, or moved	Lab
Marker Material	Used to select the material of the marker from a list of commonly seen materials in Virginia, including limestone, marble, sandstone, slate, granite, soapstone, fieldstone, concrete, zinc, metal (not zinc), or unknown	Lab
Marker Style	Used only for headstones to select the style from a list of commonly seen markers in Virginia, including ledger, tablet, flush, obelisk, pedestal, tab in socket, die on base, slant die on base, bedsted/cradle, government issue, funeral home, other, fieldstone, or not applicable	Lab
Iconography	Used to select the most prominent iconography present on the headstone from a list of commonly seen iconography in Virginia, including object, vegetal, geometric, animal, figural, religious, other, not applicable, or none	Lab
Inscription Type	Used to describe the type of inscriptions present on a marker including engraved-formal, engraved-informal, embossed-formal, embossed-informal or other	Lab
Transcription	A field used by archaeologists to transcribe in information exactly how it is formatted on the marker	Lab
Birth Date	Used to enter the interred individuals full birth date if available	Lab
Death Date	Used to enter the interred individuals full death date if available	Lab
Forename, Middle Name, and Surname	Used to enter the interred individuals entire name if available	Lab
Notes	Used to enter any additional notes on the interred individual	Lab

Feature Collection

Features information is collected much like the previously discussed forms; however, this form is more intended for subsurface feature excavation recordation. For this survey, only some of the fields are utilized to broadly categorize any collected surface features and provide notes regarding their relationship to the cemetery. This data is collected through a series of GPS points using the EOS Arrow Gold receiver and corresponding Field Maps application. Each point is taken along the perimeter of the visible feature and is represented as a polygon, much in the same

way as the cemetery survey layer. This layer is primarily used to document fencing, landscape features, garden beds, animal activity, and any depression not associated with a grave marker indicating possible burial activity, as mentioned earlier in the chapter. Including these features in the cemetery documentation is not necessarily intended for public viewing but rather to aid archaeologists in understanding less visible aspects of a cemetery and determining the actual boundaries of the site without further sub-surface delineation.

Feature polygons were collected during the Peake Family Cemetery (003) and the Fairfax County Cemetery (172) survey. The Brown-Wheeler Cemetery (009) did not undergo any feature collection as an inventory of the graves and markers was not completed for this stage in the survey. This methodology was determined using several sources and building on previously established standards developed by the ACB for digital field data collection. The results of each survey varied in both ease of execution and the type of data collected within each cemetery. The following chapters will discuss the results for each survey phase conducted and an analysis of the collected data within all three cemeteries to discern any identifiable burial trends or practices that may be interpreted using digital mapping.

Chapter 5: Cemetery Survey Results

General Survey Results and Observations

The results of a cemetery survey can have many meanings and allow for various interpretations of the data depending on the end goal of the survey itself. This thesis aims to discuss the type of data collected through this survey conducted by the ACB and to identify any visible patterns in the data that can support and add to the cultural interpretations of each site. This chapter will present the data that was collected throughout the survey of the Peake Family Cemetery (003), Fairfax County Cemetery (172), and the Brown-Wheeler Cemetery (009) to be utilized in the following analysis chapter. Chapter 2 of this thesis discussed the use of phenomenological theory in creating cemetery surveys and interpreting cemetery survey data; this survey was not created with this theory in mind, but rather, the data collected will be examined using the basic principles of this theory, the historical context of each site, and established burial practices.

At the time of writing this thesis, the ACB's cemetery survey fieldwork has not been completed. With the methodologies discussed in the previous chapter, before any fieldwork, ACB archaeologists completed a general background review of the identified sites and compiled a list of ownership and location for each. As mentioned in Chapter 4, of the 363 total cemeteries included in this survey, 43 are owned and maintained by the county, with 30 managed by FCPA and 13 by the county BOS. A breakdown of the remaining 320 cemeteries is available in Figure 6. The three sites discussed in this thesis, the Peake Family Cemetery (003) is owned and maintained by the FCPA, the Fairfax County Cemetery (172) by the county BOS, and the Brown-Wheeler Cemetery (009) is owned by a Cemetery Association making up only 0.82% of the total number of sites. Although this percentage may be small, these three sites cover a range of

cemetery types and demonstrate the two levels of survey methods used in this study: the baseline cemetery survey, and the inventory of graves and grave markers.

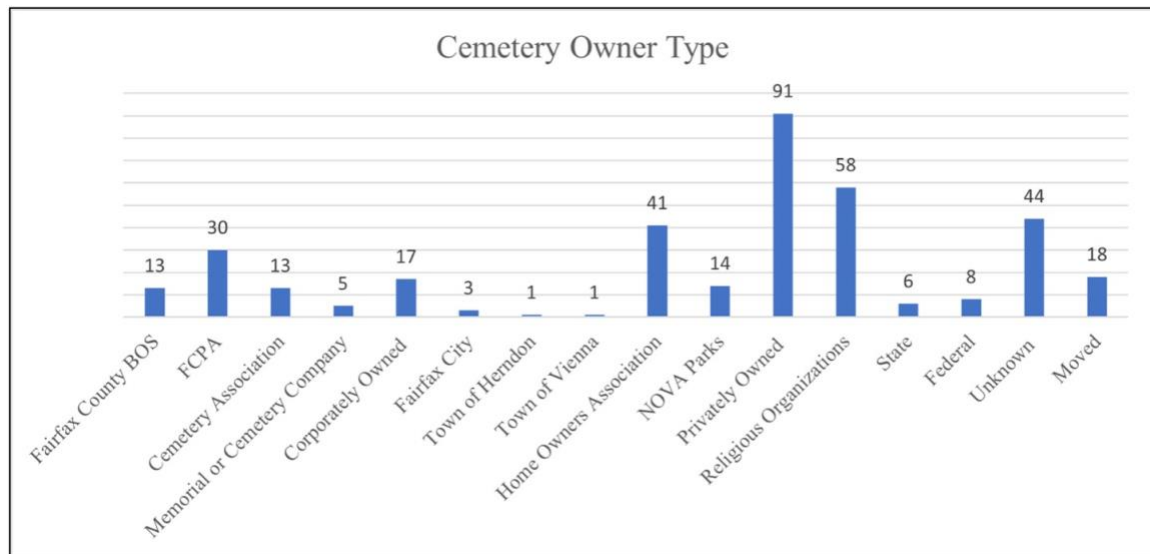


Figure 6: Cemeteries by Owner Type totals included in the ACB's Fairfax County Cemetery Survey

Cemeteries listed in the “unknown” category in Figure 6 are due to a lack of defined ownership, unknown heirs or trustees, disputed ownership, or a lack of information through general background research. Thirty-seven of the noted 44 “unknown” cemeteries will need more information before they can be appropriately categorized. In comparison, the remaining six have clearly defined ownership but need more information regarding conflicting previously recorded cemetery locations.

Using the methodologies established in the previous chapter and the compiled research, each cemetery discussed in this thesis has undergone, at minimum, the baseline cemetery survey using the GNSS receiver to collect locational data. Each point collected with the GNSS receiver has an associated horizontal accuracy, meaning the radius around which a point in space can be defined and is represented in metric units (Centimeter and Meter) on a digital map. This GNSS receiver is capable of sub-centimeter accuracy but is also susceptible to environmental factors and human error to the detriment of horizontal or vertical accuracy. This occurrence has been a noted problem throughout the cemetery survey; when in forested areas or if there is heavy cloud

coverage, the receiver will have a larger horizontal accuracy radius, and the accuracy can fluctuate between centimeters and multiple meters, as represented on the map by a circle around the calculated point. It is not ideal for collecting data in situations where the receiver cannot connect to enough satellites to triangulate its location, and in some cases where cemeteries are in forested areas with dense tree cover, it can be an unavoidable issue.

ACB archaeologists have developed some workarounds in situations where the accuracy fluctuates significantly. Moving the receiver into an area with little to no tree coverage and waiting will usually allow for satellite connection to be reestablished while observing the real-time data through ESRI's field maps application, but this increases the time spent in the field and creates more chances for human error during collection. This has been an obstacle in collecting some cemetery data, specifically during the grave and grave marker inventory. Digital data collection established by the ACB does not permit the collection of points using the receiver with an average accuracy greater than one meter. It is preferred to limit collection to less than 20 cm accuracy, but this can be challenging when data points are within one meter of each other or when the collected points seem linear in person but do not appear so on a digital map.

During the Peake Family Cemetery (003) field visit, the receiver accuracy radius fluctuated significantly and needed to be restarted and reconnected in an open space as the tree coverage interfered with data collection. A similar occurrence happened during field visits to the Fairfax County Cemetery (172); ACB archaeologists began with no issues during field collection but struggled in the regions of the site with even partial tree coverage. Though these problems persisted in the field, enough to be noted by archaeologists, the average horizontal accuracy for data collection does not seem to reflect this experience.

Peake Family Cemetery (003) Results

The Peake Family Cemetery (003) underwent a baseline cemetery survey and an inventory of grave markers and graves on March 16, 2023, by ACB archaeologists Colleen Boyle

and Brittany Blanchard. The cemetery boundaries are clearly defined by fencing and cover an area of approximately 0.33 acres; there is also a small interpretive sign affixed to the fence, giving a brief history of those known to be interred. The site was noted as being unfenced during the background research until 1989 (Fairfax County Department of Planning and Development 2007), so it is unclear whether all burials are within the presently defined boundaries of the cemetery. General site conditions are noted in the baseline cemetery survey form; archaeologists noted damage to a portion of the fence due to trees and some erosion along the southern and western boundaries of the site. Over time, the immediate area around the cemetery has likely been graded by episodes of construction of neighboring apartments, a parking lot, a walking trail, and tennis courts. In total, ACB archaeologists identified and recorded a total of 13 grave markers, seven identifiable graves, and 23 features across the site (Figure 7).

Of the 13 recorded points in the grave marker inventory, nine are categorized as headstones, one as unknown, and three as possible fieldstone markers (depicted as “unknown marker” in Figure 7). Of the nine identified headstones, three of these lie flat on the ground; it is unclear as to whether they are in the correct location, so the GPS points were taken at the current center point of each stone and noted as such (Figures 8 and 9). Due to this reason, the grave inventory did not record associated graves with each of these three markers. The recorded fieldstones did not have any engraving or clearly defining qualities. However, their presence in proximity to other clearly defined graves and possible grave depressions led archaeologists to the decision to record them as possible grave markers during this survey (Figure 10). Each of the 13 markers was collected using the GNSS receiver and recorded in ESRI’s Field Maps application; the average horizontal accuracy achieved during point collection is 0.017124 Meters (m) or 1.7124 Centimeters (cm).

Each recorded headstone had engraved lettering, allowing archaeologists to complete transcriptions of each. The earliest engraved death date on a headstone is Humphrey Peake in

1785, and the latest recorded death date is Annie Smith in 1907. Humphrey Peake's stone marker is damaged; a portion of the stone top has broken off, but the base of the stone remains intact, meaning archaeologists were able to record a grave point in association with the marker.

Unfortunately, Annie Smith's marker is no longer in its original location and lies flat on the ground with a cracked base (Figure 8). Her grave was likely recorded as a feature polygon during this survey, but no specific determination has been made regarding the actual location of her grave.



Figure 7: Peake Family Cemetery (003) ACB cemetery survey, grave, and grave marker results map, 2023.

Seven graves were recorded using the GNSS receiver, taking a GPS point at the center-most section of the visible grave depression with an average horizontal accuracy of 0.028977 m or 2.8977 cm. Multiple depressions were identified during the initial pedestrian reconnaissance,

but only the seven recorded as graves were directly associated with identified headstones. Of the 23 feature polygons recorded, 20 are defined as “Unknown, Depression,” signifying possible burial activity causing the ground to settle and sink over time (Appendix A). As discussed in Chapter 3 of this thesis, historical documents have noted the presence of burials besides those marked today, so the recorded depressions may be, in fact, burial depressions. Other features were noted across the site, though they are likely remnants of modern refuse; two stone piles and a concrete conglomeration were noted in the southeastern and southwestern most corners of the fence line of the cemetery (Appendix A).



Figure 8: Peake Family Cemetery (003) grave markers, photographs taken by the author, Colleen Boyle during March 16, 2023 ACB cemetery survey. From top left to bottom right; grave marker of Humphrey Peake; grave marker of Mary Peake; grave marker of Annie M. Smith; grave marker of Dandridge Smith.

The site boundaries, as previously defined in county and state records, are nearly identical to what was collected by ACB archaeologists during the current study. Information retrieved from the Virginia Room of the FCPL indicate at least ten individuals interred in the Peake Family Cemetery (003). The names and numbers match what was collected during the grave marker inventory in this survey. Though the location of each grave is not clear through pedestrian survey alone, the number of features recorded would suggest the actual number of individuals interred is much higher than 10. Further delineation of the site would be needed to make a more informed estimation.



Figure 9: Peake Family Cemetery grave marker damage (left) and Colleen Boyle conducting grave marker inventory for the ACB cemetery survey. Photos taken by ACB archaeologist Brittany Blanchard on March 16, 2023, used with permission.



Figure 10: Peake Family Cemetery (003) overview and probable fieldstone markers. Photos taken by the author, Colleen Boyle during the ACB's cemetery survey on March 16, 2023. From top left to bottom right: cemetery facing south; cemetery facing north; probable fieldstone markers.

Fairfax County Cemetery (172) Results

The Fairfax County Cemetery (172) underwent a baseline cemetery survey on May 9, 2023, the inventory of grave markers and graves from May 10, 2023, through June 6, 2023, by ACB archaeologists Tyler Ball, Amanda Benge, Colleen Boyle, and Aimee Wells. The cemetery boundary is clearly defined with a fence. It covers an area of approximately 0.44 acres, making it one of the largest cemeteries in this survey to include an inventory of grave markers and graves. Across the site, a total of 278 grave markers, 293 graves, and 24 features were recorded during the baseline survey and the grave and grave marker inventory (Figure 11). General cemetery conditions describe the site as fairly well-manicured but needing maintenance. A portion of the boundary fence and gate are broken or missing, some grave markers are visibly damaged from

lawn care, and others have sunken and are covered with soil and grass (Figure 12). Some graves have been lined and covered with gravel (Figure 13), though it is unclear what the original conditions of those graves were and if the interred individuals' families consented to this covering.



Figure 11: Fairfax County Cemetery (172) cemetery survey, grave, and grave marker inventory results map, data collected during the ACB cemetery survey, summer 2023.

Background research completed by ACB archaeologists uncovered a site map with general grave plot locations with the names and date of death for those interred. This map, Figure 3 in Chapter 3, was used with pedestrian reconnaissance to identify and locate grave markers no longer visible on the surface. Throughout the course of the grave marker inventory, it was noticed that there are discrepancies between the map produced by the Fairfax County Department of Public Works and the current location of the headstones. In a few cases this led to the relocation of some grave markers but not others, therefore this map was used as a preliminary test but is not

treated as a completely accurate source of information regarding the site. During the identification and marking phase of the investigation it was noticed that rebar was placed with each standard granite grave marker, a metal detector wand and a thin tile probe were used to relocate seven grave markers that had sunken, likely due to poor soil drainage as has been historically noted in background research (Figure 3). Archaeologists re-exposed the stones and documented each case in the grave marker inventory to be included in maintenance plans for the cemetery moving forward (Figure 12).



Figure 12: Uncovered grave markers in the Fairfax County Cemetery (172), photos taken by the author, Colleen Boyle in summer 2023 during the ACB's cemetery survey.

Each of the 278 grave markers was collected with the GNSS receiver and recorded in ESRI's Field Maps application. Two hundred and seventy-four of these markers had an average horizontal accuracy of 0.028359 m or 2.8359 cm at the time of field collection; four of the markers are "user-defined," meaning that these points were recorded by manually placing the point on the map application rather than using the GNSS receiver to collect an actual location.

User error is the most likely cause of this, but a “user-defined” point can happen for several reasons like the receiver was not correctly connected to the tablet used for point collection or the satellite connection is lost, causing high fluctuations in accuracy, often jumping between sub-centimeter to as much as 50-meter accuracy in the span of a few seconds. In these moments, archaeologists can choose to manually place a point in the Field Maps application rather than try to reconnect the device, and it will be recorded as “user-defined” rather than have a true longitude and latitude connected to the point.

Of the recorded 278 grave markers, 276 are recorded as headstones, with the remaining two categorized as “unknown” (Table 4). One has no visible inscription and lies flat on the ground, while the other is unclear if it is a headstone or a flat stone used to cover the grave. There is some variety of grave marker types throughout the site, but the majority are simple granite markers that lie flush with the ground. Background research indicates that these were standard issue markers for burials provided through the county beginning in 1968, just before the cemetery’s name was changed from *Potter’s Field* to the *Fairfax County Cemetery* (Kline 1968). There is no remaining evidence of the informal burial markers used prior to 1968, but there are variations or customizations to some of the standard granite markers used across the majority of the site (Table 4). Though placed retroactively in 1968, the earliest recorded burial on an engraved headstone is that of Baxter Fowler in April 1946. Two individuals do not have a known date of death as described on each respective markers, and the latest recorded death date inscribed on a marker is that of Trần Nhứt Hưng in April 1994.

293 total graves were recorded during the graves inventory, with 290 graves recorded using the GNSS receiver with an average horizontal accuracy of 0.027885 m or 2.7885 cm, and the remaining three graves are user-defined, meaning there is no average horizontal accuracy as archaeologists manually placed the points during the survey. During the initial pedestrian reconnaissance, archaeologists took note of the graves bounded by stone or brick and covered in

gravel (Figure 13). To indicate the presence of these features, the inventory form was adjusted adding additional descriptors to account for the new information. These features were then recorded as surface feature polygons to indicate their locations better visually on the digital maps used for the survey. Twenty grave data points were collected during the inventory and noted as being lined with brick or gravel, but 22 feature polygons were recorded and defined as “marker, boundary” (Appendix A).

This slight discrepancy is due to two of the surface features being much smaller and only having the grave marker lined in brick or stone rather than a more extensive covering seen in the other 20 surface features. Archaeologists could not determine the actual location of these two burials as there was no distinctive grave depression, and cremated remains may be interred below the grave marker instead. For these reasons, archaeologists did not map individual data points in these two locations on the graves inventory. However, they are mapped in the grave marker inventory as they are both marked with what are presumed to be headstones. Two other features are marked within the cemetery boundaries; the first is the fence lining the property, and the second is a garden bed along the northeastern fence line. These two features are included in the feature summary table seen in Appendix A, and both are recorded in historical records discussed in Chapter 3 of this thesis.

Table 4: Fairfax County Cemetery (172) grave marker distribution totals by descriptor.

Marker Type	Material	Iconography	Count
Headstone, Flush	Granite	None	254
		Religious	2
		Vegetal	4
		Other, Many	1
	Marble	None	2
	Metal, Not Zinc	None	2
		Vegetal	1
Headstone, Funeral Home	Metal, Not Zinc	None	2
Headstone, Government Issue	Marble	Religious	1
Headstone, Ledger	Other	Vegetal	1
Headstone, Tablet	Granite	None	1
		Religious	1
	Concrete	Vegetal	1
Headstone, Other	Marble	Other, Many	1
	Metal, Not Zinc	None	1
	Other, Coral	Not Applicable	1
Unknown, Other	Slate	Not Applicable	2
Total			278



Figure 13: Selection of bounded grave features in the Fairfax County Cemetery (172), photos taken by the author, Colleen Boyle summer 2023. Mapped as feature polygons during ACB cemetery survey.

Brown-Wheeler Cemetery (009) Results

The Brown-Wheeler Cemetery (009) was surveyed by ACB archaeologists on October 10, 2023, by Colleen Boyle and Aimee Wells, and covers approximately 1.74 acres of land. The cemetery boundaries are clearly marked by fencing and were recorded with the baseline cemetery survey, but at the time of writing this thesis, no inventory of graves or grave markers has been completed (Figure 14). This decision was made in part because the Brown-Wheeler Cemetery (009) is currently co-owned and maintained by the Browns Chapel Cemetery Association and Rev. R.O. Henly rather than Fairfax County. ACB archaeologists received permission to survey the cemetery, but there is currently no observable activity around the cemetery that would put it at further risk. Background research shows that a Phase I archaeological survey was conducted in 2015 to expand Route 7, which is just outside the previously defined cemetery boundary. Research also shows that the cemetery is recognizable for its distinctive stone arched entryway visible from Route 7.



Figure 14: Brown-Wheeler Cemetery (009), ACB cemetery survey results map, 2023.

During the field visit, ACB archaeologists noted that although the cemetery is in excellent condition, it is no longer visible from Route 7, which has the only access point, as private residences surround it on all other sides. The results of the 2015 survey found that there are likely no burials along the portion of the site close to what would be an expansion of Route 7 and a subsequent sound barrier. However, the sound barrier not only obscures the site's most recognizable feature, it is also less than 1 meter from the edge of the cemetery boundary (Figure 15). This is not necessarily a quantifiable data point but an example of how close the region's infrastructure development can come to these historic sites.



Figure 15: Brown-Wheeler Cemetery (009) site conditions, photographs taken by the author, Colleen Boyle, 2023. From top left to bottom right; cemetery facing south; cemetery facing north; facing west; arched stone entryway obscured by sound barrier along Route 7.

After pedestrian reconnaissance was completed for the rest of the cemetery, it is noted that the site remains active, containing burials dating to the early 2000s. As discussed in Chapter 3 of this thesis, the section of the cemetery reserved for the descendants of Reverend Augustus

Brown is contained in a 75' x 75' wrought iron fence (Figure 15). However, burials of other families are located outside of the fence. Most of the stones within the family plot are in good condition and appear to be granite and contemporary in design, suggesting they were placed at a later date than indicated on the engraved stones.

The results discussed in this Chapter were not collected with this thesis in mind but rather to the standards and goals set by the ACB for cemetery data collection on a large scale. Although the results of this cemetery survey are not necessarily easily quantifiable, the data presented in this Chapter can support general observations of cemetery patterns seen across Virginia and fuel further discussion on cultural patterns or burial trends as noted in historical research. These will be further assessed in the following Analysis Chapter of this thesis.

Chapter 6: Analysis of Cemetery Survey Results

Introduction

The results presented in the previous chapter broadly represent the process by which digital data collection was accomplished during the ACB's cemetery survey and the type of data collected. This chapter aims to determine whether any discernible cultural patterns within the data collected during the survey are observable through a digital medium, and if so, how does this fit into the current understanding of a site? Using what was experienced during field collection and the digital maps produced through GIS, said results will be examined and analyzed using the historical context discussed in Chapter 3 of this thesis to further contextualize each site within the established history of Virginia Burial Practices. This discussion will use the framework set in previous chapters to assess how the cemetery survey can be used in the interpretation and preservation of the Peake Family Cemetery (003), the Fairfax County Cemetery (172), and the Brown-Wheeler Cemetery (009).

When looking at these three sites through digital recreations, two things become clear: this is a very different experience than physically walking through a space, and some patterns can only be observed with the broader perspective offered through viewing data mapped in different scales. Phenomenology, as defined in Chapter 2, is a theory that seeks to humanize the study of landscapes; this can be specifically applied to this study of various cemeteries and the data's relationship to the documented history of a space. This approach is used to varying degrees of success in the case of this thesis; those cemeteries that have undergone a grave marker and grave inventory have more data to be observed and analyzed. Meanwhile, those sites that only have the baseline cemetery survey completed serve more to document current site conditions rather than discern specific burial practices or other cultural patterns. Both levels of the cemetery survey

serve different purposes but do not provide the same level of digital access to a site as would be experienced in person and thus must be discussed differently.

Peake Family Cemetery (003)

When looking through the data and maps produced from this site, several characteristics stand out from the Peake Family Cemetery (003). Historical research presented in Chapter 3 establishes this cemetery as the family burial for the Peake family, with the first recorded burial being Humphrey Peake in 1785 and the last of Mary Peake in 1805. By the 1830s, it became a burial ground for the freed black community of Gum Springs. Through the results discussed in the previous chapter, the grave and grave marker inventories confirm much of what is known about this site and follow the typical pattern of 18th-century Virginia “plantation-style” or “garden” burials (Crowell 1986; Issacs 1982; Wells 1997). The Peakes occupied and managed this land as a plantation throughout the 17th and 18th centuries; choosing a small family burial plot on their land was a fairly common practice in the region during this period. Plantation burials in rural Virginia were commonplace more out of necessity than tradition, with few established churches among communities. Many turned to familial groupings, opting to bury their dead privately rather than in churchyards (Crowell 1986; Issacs 1982; Wells 1997). Grave and grave marker data support this categorization and bring into question the identified fieldstone markers and the 17 visible depressions recorded as surface features not currently associated with a specific individual.

Grave marker data show a distinct grouping of Peake Family burials in the northern portion of the defined site, separate from the other known individuals interred in this cemetery (Figure 16). This large gap in burials is clearly visible in person and the digital maps produced, but what is not clear when observing the site in person is the distribution of fieldstones among the more formal engraved markers. Unmodified fieldstone grave markers were recorded with associated graves in three locations, as indicated in Figure 16, all in close alignment with the

Peake family, which could indicate a number of things. It is possible that these fieldstones were used to mark burials from the same period that the Peake family occupied the land or that these burials date to a time after the Peake family lost their property to debt. However, even so, the relationship of possible burials marked by unadorned fieldstones to the Peake family themselves is unclear. Two of these burials are aligned and oriented in the same direction as the closest headstone markers belonging to Humphrey Peake and Mary Peake (Figure 17). Fieldstones are a relatively common form of grave marker in this county; naturally occurring stones have been recorded in several cemeteries throughout the ACB's survey, but the placement of these unmodified fieldstones were not likely placed prior to 1785 as they are not interred along a north to south line but rather east to west. These markers are almost entirely surrounded by engraved sandstone markers used by the Peake family (Figure 16).

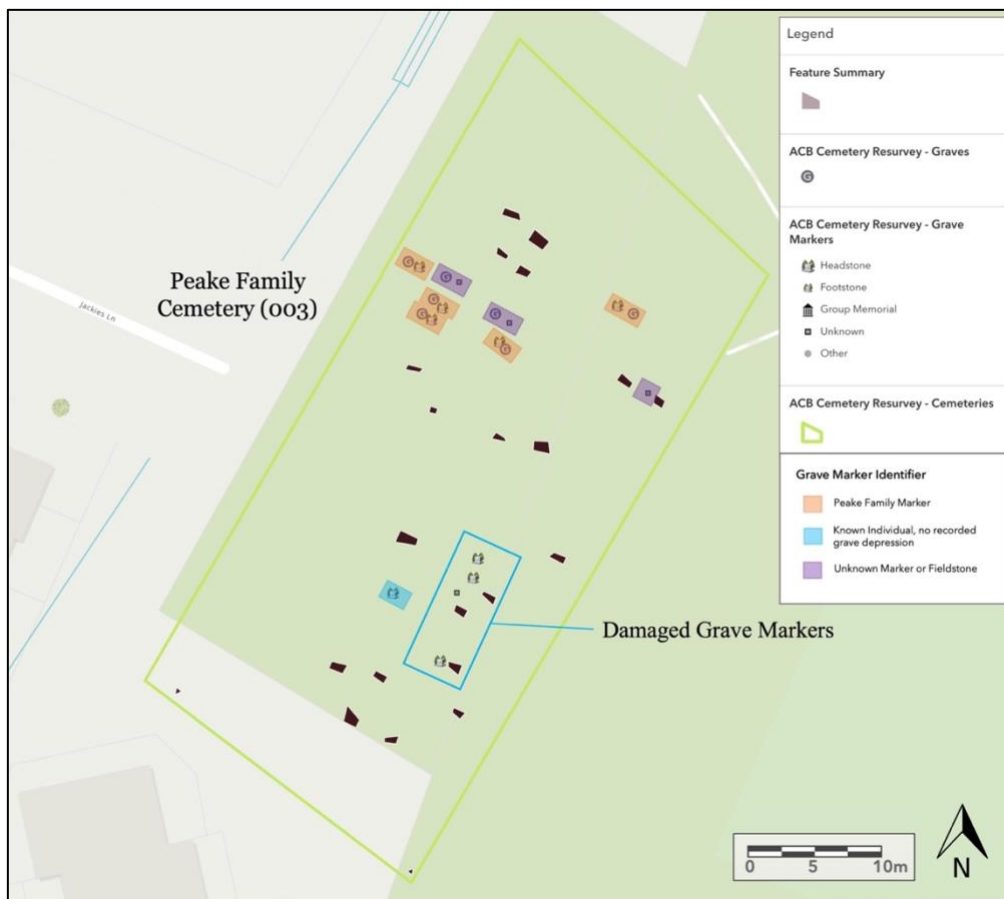


Figure 16: Map of the Peake Family Cemetery (003) grave markers by family group, produced with data collected during the FCPA ACB's 2023 Cemetery Survey

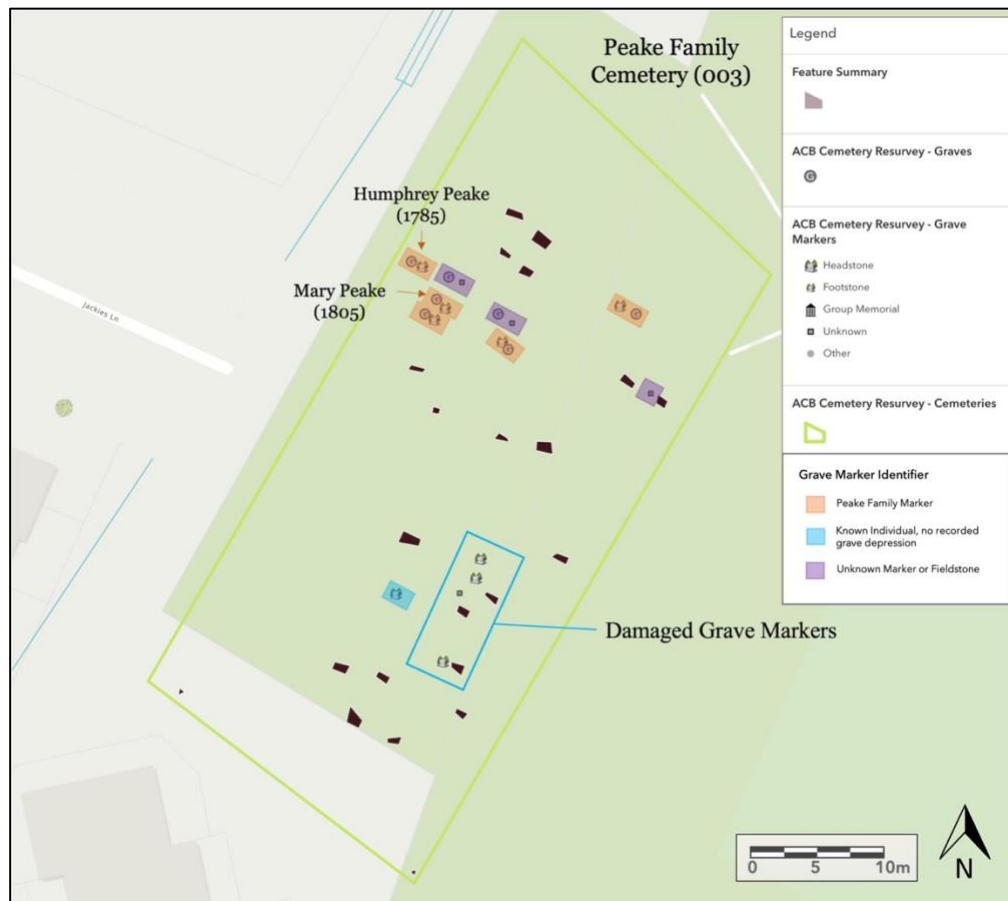


Figure 17: Humphrey and Mary Peake grave locations, produced with data collected during the FCPA ACB's Cemetery Survey, 2023.

Though 20 features were recorded during the survey as “Unknown, Depression,” three are likely affiliated with the three grave markers removed from their original locations. The remaining 17 depressions were recognized and recorded during the ACB's pedestrian survey. However, at the time, their connection to the rest of the marked graves was unclear due to topography, size of the site, and displaced markers, making it difficult to discern any clear orientation of the features. Looking at the recorded features plotted with the grave and grave marker inventory results, the separation between the small family plot for the Peaks and the later burials dating to the early 20th century no longer seem disparate (Figure 18) and appear to show that the features are oriented in the same east-west direction as the rest of the marked graves. The known history of this area and records of those interred demonstrate how the community of Gum Springs continued to use this space as a burial ground into the 20th century, with sparse activity

as noted on engraved headstones in 1825, 1845, 1884, 1906, and the last burial taking place in 1907. It is possible that burial activity continued after the Peake's occupation ended around 1805 until the formation of Gum Springs in the 1830s, as the site contains features common to an African American cemetery. A Fairfax County Inventory of Historic Places refers to an undetermined number of unmarked graves within the Peake Family Cemetery (Fairfax County Department of Planning and Development 2007). The data collected in this survey supports this interpretation of the site.

It should be noted that the term "unmarked" in this context refers to a possible grave's current state, not that the grave was always unmarked. Wood was one of the most common marker material types used in 18th-century African American cemeteries, though it is rarely preserved, unlike a sturdier material such as stone (Rainville 2014: 25). It is also possible that fieldstone was used more prevalently across the site. However, as the site was unfenced for so many years, stones may have been moved or removed entirely if not placed securely in the ground. As discussed in Lynn Rainville's 2014 book, *Hidden Inventory: African American Cemeteries in Central Virginia*, "One might assume that after emancipation, African Americans would have established new burial grounds, but this is not always the case...If one member of a couple or family died before 1865, the survivor may have chosen to be buried next to his or her relative, even after emancipation" (Rainville 2014: 65).

There are numerous possibilities for what causes these visible depressions, but whether they are burial depressions or attributed to root activity from the large trees scattered across the site (Figure 18) is unclear through the pedestrian survey. When using the maps created through this survey and historical documentation of this site and others dating to the same period, it can be concluded that there are burials beyond the ten noted individuals, but further delineation will be needed to make a more informed statement.

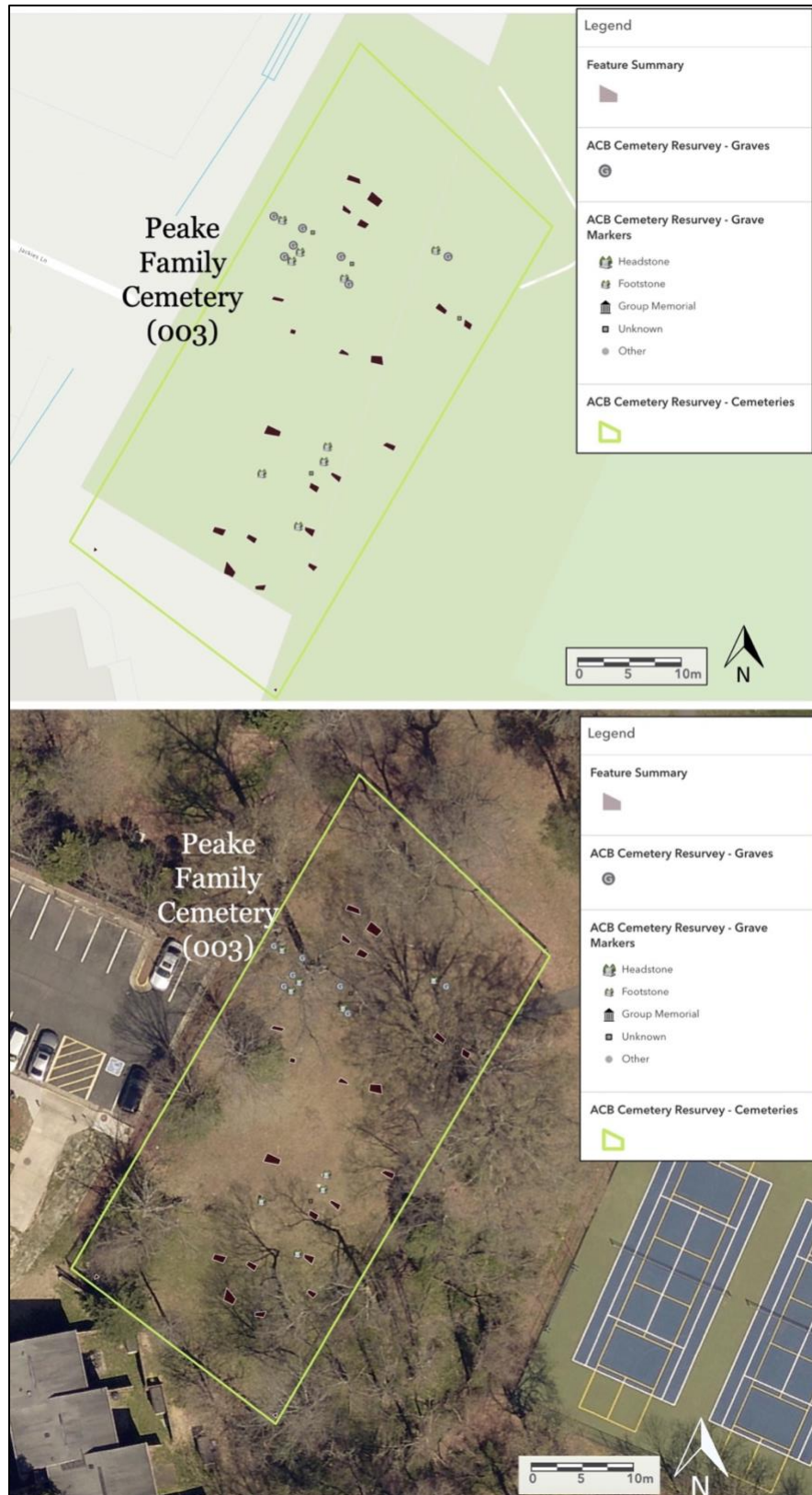


Figure 18: Peake Family Cemetery (003) feature and grave marker locations, produced with data collected during the FCPA ACB's Cemetery Survey, 2023.

Fairfax County Cemetery (172)

The Fairfax County Cemetery (172) contains some unique features in the layout and the use of grave markers across the site. Though this cemetery was created with a utilitarian purpose, it became a site with individualized characteristics that can be tracked by the date of death among those interred. Data collected during the ACB survey indicate that the earliest burials lie along the southwestern fence line, with only 25 known burials occurring between 1946 and 1969 (Table 5). Before 1968, burials on this site did not have permanent grave markers; the standard granite marker seen across the site was placed retroactively for the rededication of the cemetery from Potter's Field to the Fairfax County Cemetery in 1969, as discussed in Chapter 3. In the following decades of use, the 1970s and 1980s saw the most frequent activity, with 1985-1989 being the most active period, with 81 individuals interred (Table 5). The burials dating from the later 1970s through the last known burial in 1994 contain more personalized markers outside of the standard granite and grave coverings seen in the last decade of activity. Cemetery activity can be tracked broadly by quadrant, beginning in the southwest with the earliest burials into the 1960s, then moving into the 1970s covering most of the western half of the site, then the 1980s covering the northwestern and majority of the eastern half of the site, and finally the 1990s in the northeastern quadrant.

ACB grave maker inventory data notes that five markers do not have an attributed date of death and are categorized as "unknown," with an additional 19 grave depressions recorded with no associated grave marker. The nature of the Fairfax County Cemetery (172), as discussed in Chapter 3, began as a burial site for the unidentified or indigent. Grave markers with unattributed dates are to be expected, but it may be possible to attribute a date of burial to the markers with no known date of death, as well as those currently unmarked graves. Two of these unknown markers are located along the southwestern fence line among the earliest known burials, likely dating between 1946 and 1969. The other locations of both markers and unmarked graves range in

location, with the most significant concentration between the area dating to the transitional area between the 1980s and the 1990s, also coinciding with the most extensive period of activity on the site (Figure 19; Table 5).

Table 5: Fairfax County Cemetery (172) Grave Marker Counts by Date of Death

Death Date (increments of 5 years)	Number of Burials
1946-1949	3
1950-1954	2
1955-1959	7
1960-1964	8
1965-1969	6
1970-1974	34
1975-1979	44
1980-1984	43
1985-1989	81
1990-1994	26
Unknown, No Date	5
Unknown, No Grave Marker	19

As seen in Figure 2 of Chapter 3 and discussed in Chapter 5, historical maps created by the Fairfax County Department of Public Works were used to locate grave markers for individuals noted on the map but not visible during the initial survey. This map helped to relocate missing markers that had sunken into the ground, likely due to poor soil drainage that has been documented in the area, but also revealed many inaccuracies in the creation of this document. The discrepancies between what was recorded during the ACB's survey, and this map are noted in Figure 20; some individuals are associated with a different grave plot than recorded, and others are missing from the map entirely. Though imperfect, this map clearly shows the institutional use of this cemetery, meaning that the rows are planned and in tight order, as is represented in the data collected in the most recent survey of the site.



Figure 19: Fairfax County Cemetery (172) grave markers categorized by date of death by decade, produced with data collected during the FCPA ACB's cemetery survey, 2023.

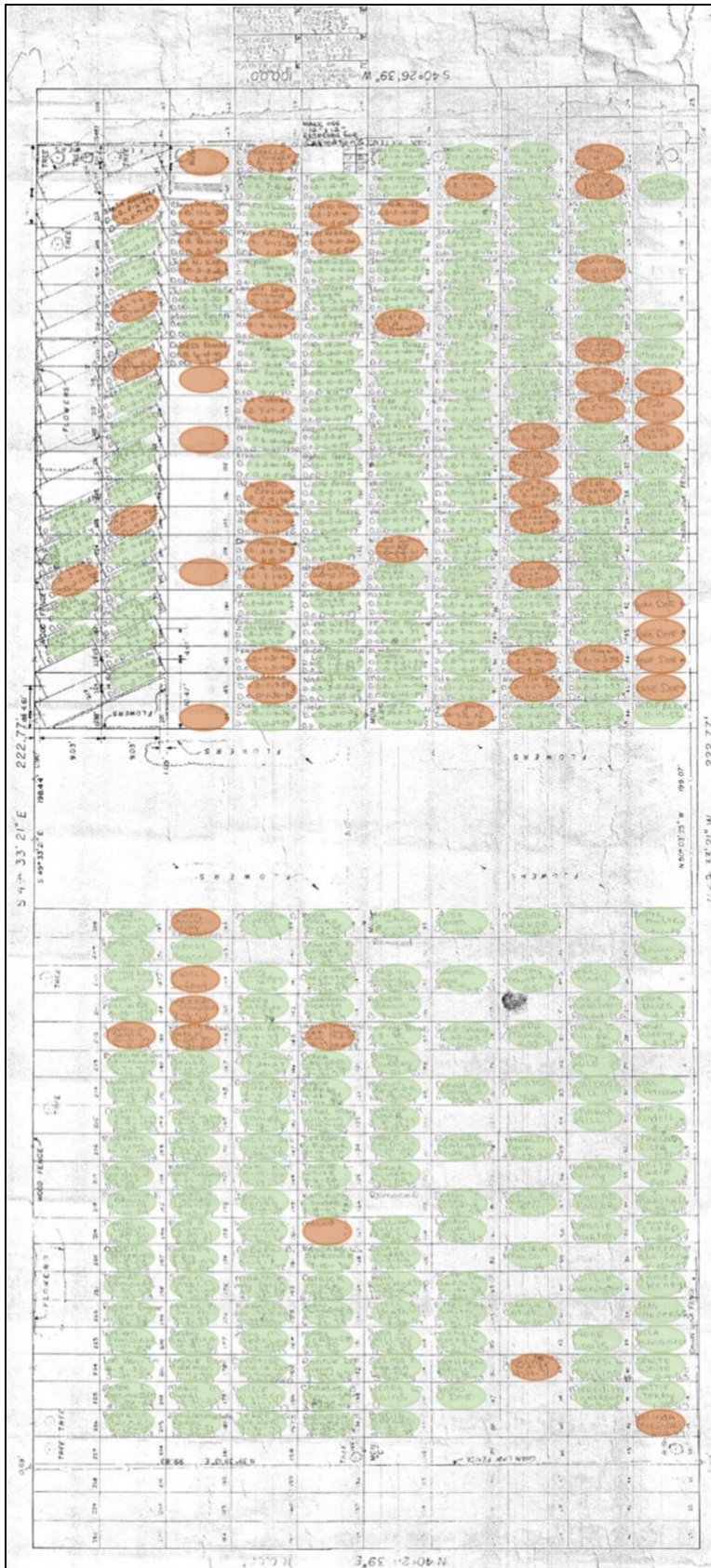


Figure 20: Scan of the grave plot map of Potters Field, now known as the Fairfax County Cemetery. Orange denotes discrepancies between this document and what was recorded during the ACB's 2023 survey, indicating missing or incorrect data on this map, while Green shows information that matches what was recorded by the ACB. The original document is housed in the Virginia Room of the FCPL, created by the Fairfax County, Virginia, Department of Public Works Office of Capital Facilities.

The standard grave markers initially provided by Fairfax County are seen across most of the site, with 261 out of the 278 recorded grave markers; a more detailed breakdown can be found in Table 4 in Chapter 5. The remaining 17 markers range from metal funeral home markers to more personalized stones or concrete markers with religious or vegetal iconography. This personalization of what began as a utilitarian space is also represented in the surface features collected during this survey. 20 graves are bounded by decorative stone, brick, or completely covered in gravel. Most of these date to the 1980s and 1990s and are concentrated in the Northeastern quadrant of the cemetery, but the purpose of these coverings is not evident in the data collected during this survey. The first two rows of the cemetery in the Northwestern quadrant are oriented slightly more toward the north than the adjacent rows (Figure 21); background research indicates this portion of the cemetery was dedicated to those individuals who practiced Islam (Cella 2005; Jacks 2006; Tubque 2007). Grave coverings do not seem to be tied to one



Figure 21: Bounded and covered grave, Fairfax County Cemetery (172), map produced with data collected during FCPA ACB's cemetery survey, 2023. Photograph taken by the author, Colleen Boyle, 2023.

religious affiliation or cultural identity as many of those interred in this area are of different nationalities with multiple languages used on recorded markers, nor are they tied to a specific section of the cemetery by these factors (Figure 22).



Figure 22: Bounded and covered grave feature headstones in Fairfax County Cemetery (172), photographs taken by the author, Colleen Boyle during FCPA ACB's cemetery survey, summer 2023.

These features also range in the type of boundary with decorative garden stone or concrete and bricks, as well as if and how much of the grave is covered (Table 6). These locations are concentrated in the area with the last 15 years of burial activity within the site. However, the specifics of each feature are too varied to be directly associated with a direct cultural practice. What is evident through the data collected is the change in orientation of these features after the first two rows back from the northeastern fence, now matching the orientation of the rest of the burials seen across the site. Many of these bounded graves show signs of frequent or recent visitation, more so than many of the burials on the western half of the site, which is likely related

to the age of those burials. Using the distribution map of death dates shows how burial activity moved through the site. It becomes clear that the site became less utilitarian and more familial in nature with the increased individualization in the use of grave coverings, signs of visitation, personalized and varied headstone markers (Table 4 in Chapter 5), and through the practice of tailored burial services discussed in Chapter 3.

Table 6: Bounded Grave Feature Descriptors Collected During FCPA ACB's Cemetery Survey, 2023.

Type of Boundary	Type of Covering	Totals
Decorative Stone or Concrete	None	2
	Coarse Gravel, Sparse	4
	Coarse Gravel, Covered	9
	Fine Gravel, Covered	1
Brick	None	2
	Course Gravel, Covered	1
None	Course Gravel, Sparse	1

Over the four decades this site was in use, its transformation can be seen in the grave and grave marker treatment trends and the improvements to the cemetery documented in Chapter 3. Community involvement pushed for formal granite headstones in 1968, permanently marking graves with only informal markers prior to this addition. 1970 into 1984 saw consistent burial activity covering most of the western half of the cemetery, with the first bounded grave placed in 1985, around the same time as individualized religious observances began to be practiced when possible (Cella 2005). Gloria L. Scales has the first recorded occurrence of a grave boundary on this site and, at the time of the survey, had signs of recent visitation with plastic flowers in good condition on either side of the headstone (Figure 23). The specific use of the bounding appears to be decorative in nature, but others seen within the cemetery could carry significance beyond decorative.



Figure 23: Grave of Gloria L. Scales, the earliest known occurrence of a bounded grave in the Fairfax County Cemetery (172), photograph taken by the author, Colleen Boyle during FCPA ACB's cemetery survey, summer 2023.

Though the cemetery has always been owned and operated by the County, three periods of activity shifted the way the cemetery was maintained and operated while active. The first was from 1946 to 1969, which saw a change from an unmarked and lightly maintained burial site beginning in 1946 as Potters Field until the site was renamed in 1969 as the Fairfax County Cemetery. The second period began in 1969 and continued until the early 1980s, expanding the institutional use of the site that started with only a few burials along the western fence line, expanding into the largest period of activity with standardized granite grave markers used for each burial. The third period of activity covers the 1980s until the site reached maximum capacity in 1994; the institutional aspects, as noted through the neat and uniform rows of the grave plots,

shifted when the County contracted a local funeral home to conduct individualized burial services as noted in Chapter 3. Though the Fairfax County Cemetery's (172) original intent did not change, burial treatment in the later years of activity tended toward individualized rather than standardized. These trends can be observed directly in the data collected during this survey, allowing for a better understanding of the site's history, identifying markers needing maintenance, and tracking any further damage to the cemetery.

Brown-Wheeler Cemetery (009)

The Brown-Wheeler Cemetery (009) is the only cemetery discussed in this thesis that did not undergo the grave and grave marker inventory, meaning that this chapter has limited data to discuss. Though emphasis has been placed on the digitized data collection process and results of the inventory levels of investigation, the baseline cemetery survey does serve a purpose in the recognition of the space. As discussed in Chapter 5, the cemetery resides along a major roadway and is entirely obscured by the Route 7 sound barrier. The pedestrian survey completed while recording cemetery boundaries allows ACB archaeologists to observe and note that the cemetery is in good condition. The Brown-Wheeler family plot sits on top of the hill at the center of the property, surrounded by a wrought iron fence with some outlying graves on the outside.

These observations are necessary for the documentation of this site, and even broadly stated information will be helpful in the long-term care of this site and further protection from encroaching urban development already seen around this cemetery. From the information gathered during background research and the field visit, the Brown-Wheeler Cemetery (009) represents a small family burial plot common to rural 19th-century Virginia. Family-focused burial sites have been documented in rural Virginia from early European settlement with plantation burials until the early 20th century when legislation limited where new burials could occur within municipalities (Wells 1997). This trend began out of necessity when there were few

established churches in the region, making it impractical to use only religious sites as a primary burial ground; families often chose to inter their dead on their own property.

The Brown family used a space the previous landowners had established as a small cemetery. Their continued use of the space rather than choosing to bury family in an established religious site was a common choice in a region where one may have to travel quite far for an interment. The Brown's choice of burial location may also have to do with the death of Anna Dunham, whose death is recorded in research as 1854, shortly after the Brown family acquired the land. Background research also indicates that the Brown-Wheeler Family continued to use this site even after several family members established an Episcopal church on their property with a new burial ground in the 1870s. Members of the family are split between both sites. They are near one another, demonstrating the fluctuating trends seen in late 19th-century burial practices between the continued use of these smaller family plots and larger religious cemeteries. Though physical documentation of this site is limited due to the nature of this survey, the information gathered lends to the interpretation of this site as a typical rural Virginia family cemetery that remains active within the Brown-Wheeler family as of October 2023. Further documentation of burial locations and grave marker conditions may lend to a more detailed analysis of this site, but until that happens, historical documentation discussed in Chapter 3 and general field observations support this classification of the cemetery.

Conclusion

The history of burial practices in Virginia can be observed in each cemetery discussed in this thesis, regardless of the level of detail collected during the field survey. The Peake Family Cemetery (003) and the Fairfax County Cemetery (172) contain elements only observable through the maps produced during the ACB's cemetery survey. When physically moving through these spaces, the scale and orientation of surface features related to existing grave markers can be lost, thus losing a level of interpretation for each site. Cemetery boundaries do not necessarily

provide enough information to make informed observations of the site, as seen with the Brown-Wheeler Cemetery (009). However, this information can still provide enough information in tandem with historical documentation to classify a cemetery within the understood burial patterns seen and documented across the mid-Atlantic region. Further study with a larger data set of cemeteries may shed light on more detailed patterns seen in cemetery practices across Fairfax County.

Chapter 7: Conclusions and Further Research

The study of cemetery landscapes can be as varied as the cemeteries themselves. As there is no one standard methodology for surveying a cemetery, there is freedom to tailor a research project to fit the needs of that particular study based on research questions and management objectives. While the data used in this thesis was not collected with the research question presented in this thesis in mind, what can be interpreted from it is as varied as the cemeteries themselves. This thesis has attempted to answer the following research question: can cemetery landscapes be understood through a phenomenological approach to interpreting cultural patterns and trends in a digital landscape? In the context of this thesis, cultural patterns refer to a broad understanding of burial practices seen through the beliefs, actions, trends, or social norms represented in historical documentation and interpreted in the data collected through this survey. Throughout this thesis, the three cemeteries discussed in previous chapters are used as data sets to identify any discernible trends in the data collected during the ACB's survey of each site from March through October 2023. Through the analysis of all three sites, it can be determined that there is merit to approaching a GIS-based cemetery study with the precision offered through geospatial data, and the conceptualization of space created using phenomenology allows for a deeper understanding than either approach could yield on its own.

Historical context for known burial patterns and local histories surrounding each site provide a more holistic background for interpreting the GIS data using a phenomenological approach. Today, physically moving through a site and viewing a site digitally using technology like GIS can be drastically different experiences, one that has garnered criticism and commendation, as discussed in Chapter 2. Each site's locational data, historical background, current conditions, field survey results, and subsequent analysis are presented in this thesis as

tools used in the identification of burial practices through the lens of phenomenology, which, in its simplest terms, seeks to humanize the study of landscape, while utilizing the precision of modern technology. An example of this application can be seen in the discussions presented in Chapter 6 of cemetery usage over time in both the Peake Family Cemetery (003) and the Fairfax County Cemetery (172). Though phenomenology can be ephemeral when interpreting geospatial data, applying this theory to the study of digital landscapes allows archaeologists or researchers to identify elements of a space that may otherwise go unnoticed.

Several conclusions can be drawn from the data collected during the survey and subsequent analysis of the Peake Family Cemetery (003) survey. The documented records and historical background of this site, discussed in Chapter 3, support the interpretation of the site's initial use as an 18th-century plantation-style family burial ground that was readapted to fit the needs of the growing community of Gum Springs in the 19th century, while the data collected during the survey provide physical evidence of this classification. The locational data of grave markers and depressions confirm much of the previously documented and reaffirm the interpretation of site usage over time. The feature documentation, as presented in Chapter 6, discusses the possibility, though not confirmed, of several unmarked graves located across the site in close association with clearly defined burials. This collected data contributes to the changing landscape in and around the cemetery boundaries from land that was occupied and managed as a plantation by the Peake Family into the freed black community of Gum Springs by the 1830s. Using locational data as a tool to interpret a space is nothing new, but as a proven method of investigation, this allows for a broader understanding of space and the progression of land use around the Peake Family Cemetery (003) over the last 200 years of use.

Though the possible grave depressions recorded as surface features were visible during initial pedestrian reconnaissance, the orientation of such features to clearly established burials and the entire cemetery is nearly impossible to discern in person. The mapping techniques used in this

survey provide enough information to make connections between the physical data and background information, indicating there are likely more people interred within this site than are currently documented. The noted site conditions during the ACB survey show that there has been significant damage to a few of the markers, three of which lie flat on the ground with no clear indication of their original location. Further study into this site may require other methods of investigation to relocate the original marker locations beyond the pedestrian walkover. Methods like GPR would locate any marker bases buried in the ground and may help determine the true nature of the recorded depressions across the site. We may never know the identity of each individual interred within the Peake Family Cemetery (003). However, the methodologies and analysis of survey results established within this thesis may help guide efforts in acknowledging the unknown individuals likely present.

As discussed in Chapter 6, the analysis of the Fairfax County Cemetery (172) survey results identified multiple periods of activity that correspond to the use of the site from the first burials seen in 1946 until reaching maximum capacity in 1994. This space was established and maintained by Fairfax County BOS as an institutional cemetery for the indigent or unknown people of Fairfax County but shows signs of movement away from uniformity over time. This site features neat and orderly rows across the Western half of the site, containing standardized granite markers, while the Eastern side contains unique surface features lining a portion of the graves. The survey and subsequent analysis of this cemetery show the progression of use and defined periods of activity that demonstrate the changes in the way the site was maintained throughout its years of activity, though not necessarily the intended function. Data collected and mapped through this survey allow a greater understanding of the site's history when analyzed with historical documentation.

The transition from the earliest uses of the site in 1946 through the 1960s shows little activity concentrated into one area of the site, as seen through the survey results. The progression

into the utilitarian nature of the site became more prevalent in the 1970s into the early 1980s as burial activity increased with little variation in grave markers or grave alignment than seen in the earlier period of activity. It can be tracked through the grave plots and markers as recorded through the grave and grave marker inventories. Mapping the brick, stone, and gravel features during this survey shows that these graves are remarkably different from surrounding graves and are only present within the site from 1985 until the end of burial activity in 1994. This final period of activity correlates with documentation describing private funeral services during the 1980s, prioritizing personalized services when possible. Visual representations of these grave coverings through digital mapping highlight the separation between partitions of this cemetery by the date an individual was interred. Following the trends of burial practices as they move throughout the site allows for a more holistic understanding of the history of this site, which will assist the future care and management of this cemetery. Using the information gathered through this survey may aid in the repairs needed for specific grave markers and maintain the current status of the grave coverings by tracking current conditions.

The Peake Family Cemetery (003) and the Fairfax County Cemetery (172) received a detailed analysis of the survey results as they each underwent the baseline cemetery survey and the grave and grave marker inventories. The Brown-Wheeler Cemetery (009) may seem limited in the information that can be discussed as the site only received the baseline cemetery survey. However, a site can provide much information to a researcher when observed with the newly digitized map and historical documentation. The simple recognition of a site and current conditions can safeguard a space that serves a specific purpose but may not be visited often. As discussed in Chapters 3 and 6 of this thesis, the Brown-Wheeler Cemetery (009) represents a category of cemetery seen across Virginia during the 18th and 19th centuries, a small family-focused burial site with roots in the plantation-style burials seen in the early 18th century. Historical documentation shows that this site fits well within the current understanding of a

typical burial practice seen in rural Virginia during its establishment, and the 2023 ACB survey records the progression of land use, and the effect modern infrastructure can have on a cemetery landscape such as this.

The Brown-Wheeler Cemetery (009) has many avenues for future research, but the limitations of this particular survey prevent more detailed data collection with the grave and grave marker inventories. This documentation level would likely provide more information regarding the specific burial patterns within the fenced family section of the cemetery. Documents refer to the site's nature before the Brown family purchased the land and the possibility of three small graves remaining from the previous occupants. Further inquiry using GPR may identify any other burials not currently associated with a known individual and could confirm what was recorded during the 2015 and 2023 pedestrian walkovers. This site may have more to tell those who question, but until then, a baseline cemetery survey does much in confirming the currently defined boundaries and conditions of this site for future reference.

Each cemetery site discussed in this thesis, regardless of the level of detail collected during the field survey, highlights a variety of cemetery categorizations and burial practice trends historically noted across Virginia from the 17th to the 20th centuries. The Peake Family Cemetery (003) and the Fairfax County Cemetery (172) contain evidence of features only observable through a broader perspective of the landscape and recorded history of land use over time. In the context of both the Brown-Wheeler Cemetery and the broader cemetery study, physically walking through these spaces, as the theory of phenomenology dictates, does not allow for a complete understanding of the scale and orientation of various surface features to clearly defined graves, as recorded during the ACB's 2023 survey. The data collected from the Brown-Wheeler Cemetery (009) may not provide enough information to make informed observations as is possible with a grave and grave marker inventory. However, this level of recordation serves not only to document the current conditions and boundaries but can also be used to identify broad

settlement patterns using available historical records of a site. Though a phenomenological approach to a pedestrian survey has limitations, the addition of precise geospatial data supports applying the theory by interpreting said data. Both approaches, as presented in the literature of Chapter 2 of this thesis, may be opposed in concept but, in practice, can reinforce one another in how data is collected and interpreted. Phenomenology's strength lies in interpreting how a space was used but fails to provide an avenue of proof or a more comprehensive understanding of space. Geospatial data alone can lack the human elements needed for interpretation but excels in clear and accurate documentation that is not present in a phenomenological approach. It can be concluded that cemetery recordation benefits from a hybrid approach utilizing geospatial technology and the application of phenomenology to breach the limitations within each methodology.

As a historic resource, cemeteries can have deep connections to the communities they reside within and carry heavy significance to the families of those interred while also being a vital source of information on local history. Future research of cemeteries within Fairfax County or adjacent regions may uncover additional information regarding trends identified in the sites referenced throughout this thesis. An analysis of cemetery patterns on a broad scale across Fairfax County using the data from the completed survey may reveal more detailed settlement patterns visible through analyzing a more extensive data set rather than a single site. The study and recordation of these cemeteries serve to not only preserve the resource but acknowledge the connection physical space can have with local history and those who lived it.

Appendix A

Summary of collected feature polygons from the ACB's survey of the *Peake Family Cemetery* (003) and the *Fairfax County Cemetery* (172).

Cemetery Name/ number	investigator	Investigator-Other	date opened	Notes - Feature Summary	Feature Interpretation	Feature-Cultural period	Feature position
003 Peake Family Cemetery	Colleen Boyle	Brittany Blanchard	3/16/2023, 9:09 AM	Possible grave in line with existing grave marker	Unknown, Depression	Indeterminate	Surface
003 Peake Family Cemetery	Brittany N. Blanchard	Colleen Boyle	3/16/2023, 9:20 AM	Possible grave depression	Unknown, Depression	Indeterminate	Surface
003 Peake Family Cemetery	Brittany N. Blanchard	Colleen Boyle	3/16/2023, 9:17 AM	Possible grave depression	Unknown, Depression	Indeterminate	Surface
003 Peake Family Cemetery	Colleen Boyle	Brittany Blanchard	3/16/2023, 9:17 AM	Possible grave depression in line with existing grave marker	Unknown, Depression	Indeterminate	Surface
003 Peake Family Cemetery	Colleen Boyle	Brittany Blanchard	3/16/2023, 10:09 AM	Possible grave depression in line with existing grave marker	Unknown, Depression	Indeterminate	Surface
003 Peake Family Cemetery	Colleen Boyle	Brittany Blanchard	3/16/2023, 10:11 AM	Possible grave depression in line with existing grave marker	Unknown, Depression	Indeterminate	Surface
003 Peake Family Cemetery	Colleen Boyle	Brittany Blanchard	3/16/2023, 10:13 AM	Possible grave depression	Unknown, Depression	Indeterminate	Surface
003 Peake Family Cemetery	Brittany N. Blanchard	Colleen Boyle	3/16/2023, 10:16 AM	Possible grave depression	Unknown, Depression	Indeterminate	Surface
003 Peake Family Cemetery	Colleen Boyle	Brittany Blanchard	3/16/2023, 10:15 AM	Possible grave depression	Unknown, Depression	Indeterminate	Surface
003 Peake Family Cemetery	Brittany N. Blanchard	Colleen Boyle	3/16/2023, 10:19 AM	Possible grave depression	Unknown, Depression	Indeterminate	Surface
003 Peake Family Cemetery	Colleen Boyle	Brittany Blanchard	3/16/2023, 10:18 AM	Concrete conglomerate, under a tree, construction material?	Other	Indeterminate	Surface
003 Peake Family Cemetery	Colleen Boyle	Brittany Blanchard	3/16/2023, 10:21 AM	Possible grave depression inline with existing grave marker	Unknown, Depression	Indeterminate	Surface

003 Peake Family Cemetery	Colleen Boyle	Brittany Blanchard	3/16/2023, 10:26 AM	Possible grave depression	Unknown, Depression	Indeterminate	Surface
003 Peake Family Cemetery	Colleen Boyle	Brittany Blanchard	3/16/2023, 10:31 AM	Possible grave depression, likely associated with down markers (Dandridge Smith), but not in line	Unknown, Depression	Indeterminate	Surface
003 Peake Family Cemetery	Colleen Boyle	Brittany Blanchard	3/16/2023, 10:36 AM	Possible grave depression inline with existing grave marker	Unknown, Depression	Indeterminate	Surface
003 Peake Family Cemetery	Colleen Boyle	Brittany Blanchard	3/16/2023, 10:46 AM	Likely grave depression associated with down grave marker, not quite in line but very close in proximity	Unknown, Depression	Indeterminate	Surface
003 Peake Family Cemetery	Colleen Boyle	Brittany Blanchard	3/16/2023, 10:49 AM	Possible grave depression	Unknown, Depression	Indeterminate	Surface
003 Peake Family Cemetery	Colleen Boyle	Brittany Blanchard	3/16/2023, 10:50 AM	Possible grave depression	Unknown, Depression	Indeterminate	Other
003 Peake Family Cemetery	Colleen Boyle	Brittany Blanchard	3/16/2023, 10:52 AM	Possible grave depression	Unknown, Depression	Indeterminate	Surface
003 Peake Family Cemetery	Colleen Boyle	Brittany Blanchard	3/16/2023, 10:55 AM	Possible grave depression, possible erosion, on a slight slope	Unknown, Depression	Indeterminate	Surface
003 Peake Family Cemetery	Colleen Boyle	Brittany Blanchard	3/16/2023, 10:59 AM	Possible grave depression, could be erosion	Unknown, Depression	Indeterminate	Surface
003 Peake Family Cemetery	Colleen Boyle	Brittany Blanchard	3/16/2023, 11:02 AM	Stones in corner of cemetery fence	Stone Pile	Indeterminate	Surface
003 Peake Family Cemetery	Colleen Boyle	Brittany Blanchard	3/16/2023, 11:05 AM	Stone pile, looks like construction materials	Stone Pile	Indeterminate	Surface
172 Fairfax Co. Cemetery	Colleen Boyle	Aimee Wells	5/10/2023, 1:40 PM	Gravel lined grave	Marker, Boundary	Indeterminate	Surface

172 Fairfax Co. Cemetery	Colleen Boyle		5/10/2023, 1:43 PM	Gravel lined headstone	Marker, Boundary	Indeterminate	Surface
172 Fairfax Co. Cemetery	Colleen Boyle	Tyler Ball, Aimee Wells	6/6/2023, 9:32 AM	Bounded grave	Marker, Boundary	Indeterminate	Surface
172 Fairfax Co. Cemetery	Colleen Boyle	Tyler Ball, Aimee Wells	6/6/2023, 9:37 AM	Bounded grave	Marker, Boundary	Indeterminate	Surface
172 Fairfax Co. Cemetery	Colleen Boyle	Tyler Ball, Aimee Wells	6/6/2023, 9:46 AM	Bounded grave	Marker, Boundary	Indeterminate	Surface
172 Fairfax Co. Cemetery	Colleen Boyle	Tyler Ball, Aimee Wells	6/6/2023, 9:52 AM	Bounded grave	Marker, Boundary	Indeterminate	Surface
172 Fairfax Co. Cemetery	Colleen Boyle	Tyler Ball, Aimee Wells	6/6/2023, 9:54 AM	Bounded grave	Marker, Boundary	Indeterminate	Surface
172 Fairfax Co. Cemetery	Colleen Boyle	Tyler Ball, Aimee Wells	6/6/2023, 9:57 AM	Bounded grave	Marker, Boundary	Indeterminate	Surface
172 Fairfax Co. Cemetery	Colleen Boyle	Tyler Ball, Aimee Wells	6/6/2023, 9:59 AM	Bounded grave	Marker, Boundary	Indeterminate	Surface
172 Fairfax Co. Cemetery	Colleen Boyle	Tyler Ball, Aimee Wells	6/6/2023, 10:01 AM	Bounded grave	Marker, Boundary	Indeterminate	Surface
172 Fairfax Co. Cemetery	Colleen Boyle	Tyler Ball, Aimee Wells	6/6/2023, 10:03 AM	Bounded grave	Marker, Boundary	Indeterminate	Surface
172 Fairfax Co. Cemetery	Colleen Boyle	Tyler Ball, Aimee Wells	6/6/2023, 10:05 AM	Bounded grave	Marker, Boundary	Indeterminate	Surface
172 Fairfax Co. Cemetery	Colleen Boyle	Tyler Ball, Aimee Wells	6/6/2023, 10:07 AM	Bounded grave	Marker, Boundary	Indeterminate	Surface
172 Fairfax Co. Cemetery	Colleen Boyle	Tyler Ball, Aimee Wells	6/6/2023, 10:09 AM	Bounded grave	Marker, Boundary	Indeterminate	Surface
172 Fairfax	Colleen Boyle	Tyler Ball, Aimee Wells	6/6/2023, 10:11 AM	Bounded grave	Marker, Boundary	Indeterminate	Surface

Co. Cemetery							
172 Fairfax Co. Cemetery	Colleen Boyle	Tyler Ball, Aimee Wells	6/6/2023, 10:13 AM	Bounded grave	Marker, Boundary	Indeterminate	Surface
172 Fairfax Co. Cemetery	Colleen Boyle	Tyler Ball, Aimee Wells	6/6/2023, 10:15 AM	Bounded grave	Marker, Boundary	Indeterminate	Surface
172 Fairfax Co. Cemetery	Colleen Boyle	Tyler Ball, Aimee Wells	6/6/2023, 10:22 AM	Bounded grave	Marker, Boundary	Indeterminate	Surface
172 Fairfax Co. Cemetery	Colleen Boyle	Tyler Ball, Aimee Wells	6/6/2023, 10:25 AM	Bounded grave	Marker, Boundary	Indeterminate	Surface
172 Fairfax Co. Cemetery	Colleen Boyle	Tyler Ball, Aimee Wells	6/6/2023, 10:27 AM	Bounded grave	Marker, Boundary	Indeterminate	Surface
172 Fairfax Co. Cemetery	Colleen Boyle	Tyler Ball, Aimee Wells	6/6/2023, 10:29 AM	Bounded grave	Marker, Boundary	Indeterminate	Surface
172 Fairfax Co. Cemetery	Colleen Boyle	Tyler Ball, Aimee Wells	6/6/2023, 10:31 AM	Bounded grave	Marker, Boundary	Indeterminate	Surface
172 Fairfax Co. Cemetery	Tyler Ball	Colleen Boyle	5/9/2023	Cemetery boundary, modern chain link fence	Fence	modern	Surface
172 Fairfax Co. Cemetery	Colleen Boyle	Tyler Ball, Aimee Wells	5/10/2323	garden bed lined with decorative brick	Garden bed	Indeterminate	surface

Bibliography

- Allen, Kathleen; Stanton W. Green; Ezra B.W. Zubrow (editor)
1990 *Interpreting Space: GIS and Archaeology*. Taylor and Francis: London and New York.
- Archaeology and Collections Branch
2023 *Cemetery Survey*. Fairfax County Park Authority.
<https://www.fairfaxcounty.gov/parks/archaeology/cemeteries>.
- Barret, John C. and Illhong Ko
2009 A phenomenology of landscape: A crisis in British landscape archaeology? *Journal of Social Archaeology* 9(3): 275-294.
- Boulden, James.
1986 "Letter to the Division of Historic Preservation Fairfax County Park Authority regarding Peake Family Cemetery", 3 August, 1986.
- Cannon, Irena Leisbet Ceridwen and Archie W. Simpson
2018 Critical Geography: An Introduction. International Relations Theory. *E-International Relations Foundation*. <https://www.eir.info/2018/01/21/critical-geography-an-introduction/>.
- Carmac, Sharon De Bartlo
2002 *Your Guide to Cemetery Research*, OH: Betterway Books.
- Cella, Matthew.
2005 'Potter's field' branch out. *The Washington Times*, November 12.
<https://www.washingtontimes.com/news/2005/nov/12/20051112-105315-1625r/>, accessed 14 December, 2023.
- Chicora Foundation
1998 *Recording Historic Cemeteries: A Guide for Historical Societies and Genealogists*. Columbia, South Carolina.
- Coffin, Margaret M
1976 *Death in Early America*. New York: Thomas Nelson, Inc.
- Conley, Brian A.
1994 *Cemeteries of Fairfax County*. Fairfax County Public Library.
<https://ead.lib.virginia.edu/vivaxtf/view?docId=fcpl/vif00068.xml>.
- Crowell, Elizabeth A.
1986 ""They Lie Interred Together": An Analysis of Gravestones and Burial Patterns in Colonial Tidewater Virginia." *Dissertations, Theses, and Masters Projects*. William & Mary. Paper 1539625364.
<https://dx.doi.org/doi:10.21220/s2-rt89-dm59>.
- Daly, Patrick and Gary Lock
2004 Time, Space and Archaeological Landscapes: Establishing Connections in the First Millennium BC. In *Spatially Integrated Social Science*, edited by Michael F. Goodchild and Donald G. Janelle. Oxford: Oxford University Press, 349-365.
- Deeben, John P.
2012 Family Experiences and New Deal Relief; The Correspondence Files

- of the Federal Emergency Relief Administration, 1933-1936. *Prologue Magazine*, Genealogy Notes 44(2), hosted with the National Archives. <https://www.archives.gov/publications/prologue/2012/fall/fera.html>, accessed 3 January, 2024.
- Deetz, James
 1977 *In Small Things Forgotten*. Garden City, New York: Doubleday Press.
- Dethlefsen, Edwin and James Deetz
 1966 Death's Heads, Cherubs, and Willow Trees: Experimental Archaeology in Colonial Cemeteries. *American Antiquity*. 1966;31(4):502-510. doi:10.2307/2694382.
- Diserens, Kathryn Chambon
 2013 Mining the Qualitative from the Quantitative: Re-Evaluating Cemetery Survey for the Field of Historic Preservation. Master's Thesis, University of Pennsylvania, Philadelphia, PA.
- Executive Director
 1968 "MEMORANDUM, Humphrey Peake Cemetery for files." Documented April 19, 1968, housed in the Fairfax County Public Library Cemetery 003 files.
- Fairfax County Department of Planning and Development.
 2007 *Fairfax County Inventory of Historic Sites Report: Brown's Chapel*. First listed 1968, Fairfax County, Virginia.
 2007 *Fairfax County Inventory of Historic Sites Report: Peake Family Cemetery*. First listed September 1, 1976, Fairfax County, Virginia.
- Fairfax County Public Library.
 2023 *Fairfax County Cemetery Survey*. https://www.fairfaxcounty.gov/library_cemeteries/, accessed 17 December, 2023.
 2023 *Guide to Fairfax County History*, <https://research.fairfaxcounty.gov/local-history>.
- Fairfax Genealogical Society
 1988 "CEMETERY RECORD PROJECT." Fairfax County Gravestones Books, Survey Form completed by James Barry 5 May, 1988.
- Gannett, Henry.
 1905 *The Origin of Certain Places Names in the United States*. Second Edition. Washington Government Printing Office. Bulletin no. 258, Series F, Geography, 45, Department of the Interior United States Geological Survey, Washington, District of Columbia.
- General Assembly of the State of Virginia
 1876 *An Act in Relation to Cemeteries and Cemetery Associations*. Acts and Joint Resolutions Passed by the General Assembly of the State of Virginia at the Session of 1875-1876. Richmond: R. F. Walker, Superintendent of Public Printing, 1876:38- 39.
- Gillings, Mark
 2012 Landscape Phenomenology, GIS and the Role of Affordance. *Journal of Archaeological Method and Theory* 19(4): 601-611.
- Goode, Cynthia V. and Sarah Traum

- 2015 *Cultural Resource Survey for the Route 7 Improvement Project, Fairfax County, Virginia*. John Milner Associates, Inc., a CCRG Company, Alexandria, Virginia, for Virginia Department of Transportation, NOVA District, Fairfax, Virginia.
- Green, Stanton W.
1990b Sorting Out Settlement in Southeastern Ireland: Landscape Archaeology and Geographic Information Systems. *Interpreting Space: GIS and Archaeology*: 365-363.
- Gregory, Ian N., Karen K. Kemp, and Ruth Mostern
2001 Geographical Information and Historical Research: Current Progress and Future Directions. *History & Computing* 13(1): 7-23.
- Hacıgüzeller, Piraye
2012 GIS, critique, representation and beyond. *Journal of Social Archaeology* 12(2): 245–263.
- Historical Society of Fairfax County, Virginia
2023 The Historical Society of Fairfax County, Virginia. <https://www.fairfaxhistoricalsociety.org/index.html>, accessed 17 December, 2023.
- Hollis, Linda Allen B.
2018 “Who Was West Ford?” Official Website of West Ford Legacy. <https://westfordlegacy.com/article/30>, accessed 18 December, 2023.
- Hu, Di
2012 Advancing Theory? Landscape Archaeology and Geographical Information Systems. *Papers from the Institute of Archaeology* 21(0): 80-90.
- Isaac, Rhys
1982 *The Transformation of Virginia: 1740-1790*. Chapel Hill: The University of North Carolina Press.
- Jacks, Jason
2006 County seeks help with laying to rest its unclaimed deceased. *Times Community Newspapers*, 3 January, 2006, Fairfax County, Virginia.
- Johnson, Matthew H.
2012 Phenomenological Approaches in Landscape Archaeology. *Annual Review of Anthropology* 41: 269–84.
- Jones, Betty
1968 Fairfax’s Potter’s Field Renovated. *The Washington Daily News*, 15 February, Washington, District of Columbia.
- Jones, Dervy Becker
2019 “Peake Family Cemetery.” The Historical Marker Database. <https://www.hmdb.org/m.asp?m=131555>, accessed 18 December, 2023.
- Jones, Reverend Hugh
1724 *The Present State of Virginia*. London, England.
- Keister, Douglas.
2004 *Stories in Stone: A Field Guide to Cemetery Symbolism and Iconography*. Salt Lake City: Gibbs Smith.
- Kline, O. M.
1968 “Kline Memorials granite markers invoice to Fairfax County Board of

- Supervisors.” KLINE MEMORIALS, Documented 18 March, 1968, housed in Fairfax County Public Library Cemetery 172 files.
- Kwan, Mei-Po
 2004 Beyond Difference: From Canonical Geography to Hybrid Geographies. *Annals of the Association of American Geographers* 94(4): 756–763.
- Library of Virginia
 2003 “Virginia Historical Inventory.” Legacies of the New Deal Exhibit, 14 April, 2003 through 6 December, 2003. <https://www.lva.virginia.gov/exhibits/newdeal/vainventory.htm>, accessed 3 January, 2024.
 2022 “Virginia Historical Inventory Overview.” Research Guides and Indexes. [https://lvavirginia.libguides.com/historicalinventory#:~:text=The%20Virginia%20Historical%20Inventory%20\(VHI,history%2C%20and%20Civil%20War%20history](https://lvavirginia.libguides.com/historicalinventory#:~:text=The%20Virginia%20Historical%20Inventory%20(VHI,history%2C%20and%20Civil%20War%20history), accessed 3 January, 2024.
- Liebens, Johan
 2003 Map and Database Construction for an Historic Cemetery: Methods and Applications. *Historical Archaeology* 37(4): 56–68.
- Leistle, Bernhard
 2022 “Phenomenological Arguments and Concepts for Anthropology.” *Anthropology*. Oxford Research Encyclopedias. <https://doi.org/10.1093/acrefore/9780190854584.013.465>, accessed 16 April, 2024.
- Lipsey, Mary
 2010 “Fairfax County Cemetery Preservation Association Cemetery Survey; Brown’s Memorial” Fairfax County Cemetery Preservation Association, July 2010. Document housed in the Fairfax County Public Library Cemetery 009 files.
- Lopez, Ann
 1976 “FAIRFAX COUNTY, VIRGINIA MEMORANDUM; Potter’s Field.” Documented 2 February, 1976, housed in the Fairfax County Public Library Cemetery 172 files.
- Maryland Historic Trust
 2007 Historic Cemeteries and Burial Grounds: Documentation & Preservation. *Preservation Bulletin* 2, September 2007. www.marylandhistoricaltrust.net/PresBulletin2_Cemeteries.pdf.
- Maschner, Herbert D. G.
 1996 Geographic Information Systems in Archaeology. *New Methods, Old Problems: Geographic Information Systems in Modern Archaeological Research*. Occasional Paper 23. Carbondale: Center for Archaeological Investigations, 301-306.
- Matero, Frank G. and Judy Peters
 2003 Survey Methodology for the Preservation of Historic Burial Grounds and Cemeteries. *APT Bulletin*: 34(2-3).
- McMullen, H.C.
 1936 *Works Progress Administration of Virginia Historical Inventory. THE ANNA DUNHAM GRAVEYARD*. Virginia Conservation Commission, 26 February, 1936.

- Meade, Elizabeth D.
 2020 'Prepare for Death and Follow Me': An Archaeological Survey of the Historic Period Cemeteries of New York City. Ph.D. Dissertation. The Graduate Center, City University of New York.
https://academicworks.cuny.edu/gc_etds/3725.
- Mitford, Jessica
 1963 *The American Way of Death*. New York: Simon and Schuster.
- Muller, Stephen
 2015 Colonial Experiences of Death, Burial and Memorialisation in West Terrace Cemetery, Adelaide: Applying a Phenomenological Approach to Cultural Landscapes in Historical Archaeology. *Australasian Historical Archaeology* 33: 15–26.
- National Archives
 1995 "Records of the Work Projects Administration [WPA], (RECORD GROUP 69) 1922-44 (Bulk 1930-44)." Compiled by Robert B. Matchette et al. Washington, DC: National Archives and Records Administration, <https://www.archives.gov/research/guide-fed-records/groups/069.html#top>, accessed 3 January, 2024.
- Netherton, Nan, Donald Sweig, Janice Artemel, Patricia Hickin and Patrick Reed
 1978 *Fairfax County Virginia: A History*. Fairfax, VA: Fairfax County Board of Supervisors.
- Palmer, Erin H.
 2021 New East Cemetery archive documents Black lives. *Virginia Genealogical Society Newsletter* 47(1): 4-6.
- Pettitt, Alisa and Jonathan Mayes
 2012 *Ridge and Uplands Archaeological Survey, On the Old Colchester Park and Preserve, Lorton, Fairfax County, Virginia*. Fairfax County Park Authority. Report on file at the Fairfax County Park Authority, Archaeology and Collections Branch archives.
- Pritsolas, Joshua, and Gillian Acheson
 2017 The Evolution of a Small Midwestern Cemetery: Using GIS to Explore Cultural Landscape. *Material Culture* 49(1): 49–77.
- Rainville, Lynn
 2009 "Protecting Our Shared Heritage in African-American Cemeteries." *Journal of Field Archaeology* 34(2): 196-206.
 2014 *Hidden Inventory: African American Cemeteries in Central Virginia*. Charlottesville: University of Virginia Press.
- Romanowska, Iza, Stefani A. Crabtree, Kathryn Harris, and Benjamin Davies
 2019 Agent-Based Modeling for Archaeologists: Part 1 of 3. *Advances in Archaeological Practice* 7(2): 178–84.
- Sager, Mike.
 1983 POTTER'S FIELD, Fairfax County's Dreary Graveyard For the Destitute, Adrift or Anonymous. *The Washington Post*, March 25.
<https://www.washingtonpost.com/archive/politics/1983/03/25/potters-field/da276dc3-c9cb-4e85-950a-e219e579e614/>, accessed 14 December, 2023.

- Snowden, William H.
 1903 *Some old historic landmarks of Virginia and Maryland, described in a hand-book for the tourist over Washington, Alexandria and Mount Vernon Electric Railway*. Fifth Edition. G. H. Ramey & Son, Alexandria, Virginia.
- Spera, Stephanie A., Matthew S. Franklin, Elizabeth A. Zizzamia, and Ryan K. Smith
 2022 Recovering a Black Cemetery: Automated Mapping of Hidden Gravesites Using an sUAV and GIS in East End Cemetery, Richmond, VA. *International Journal of Historical Archaeology* 26: 1110-1131.
- Sweig, Donald
 1978 1649-1800. In *Fairfax County, Virginia: A History*, edited by Nan Netherton. Fairfax County Board of Supervisors, Fairfax, Virginia, 3-149.
- The Washington Post
 1968 "City Life in Greater Washington, Chapel's Travel." May 3:C1. Washington, District of Columbia.
- Thomas, Julian
 2004 *Archaeology and Modernity*. Psychology Press. Routledge, London and New York: Taylor and Francis Group.
- Thompson, Mary V.
 2023 "West Ford." George Washington's Mount Vernon, Washington Library, Digital Encyclopedia. <https://www.mountvernon.org/library/digitalhistory/digitalencyclopedia/article/west-ford/>, accessed 18 December, 2023.
- Thrall, F. Lloyd
 1990 "BROWN'S MEMORIAL CEMETERY." 5 June, 1990. Document housed in the Fairfax County Public Library Cemetery 009 files.
- Tilley, Christopher
 1994 *A Phenomenology of Landscape: Places, Paths, and Monuments*. Oxford, UK: Berg.
 2004 *The Materiality of Stone: Explorations in Landscape Phenomenology 1*. Oxford, UK: Berg.
- Tubque, Bill.
 2007 Finding a New Home for Indigent Dead. *Fairfax Extra*, August 9: 14, Fairfax.
- Verhagen, Philip
 2017 Spatial Analysis in Archaeology: Moving into New Territories. *Digital Geoarchaeology: Natural Science in Archaeology*. 11-25.
- Virginia Department of Historic Resources
 2017 *GUIDELINES FOR CONDUCTING HISTORIC RESOURCES SURVEY IN VIRGINIA*. Richmond, Virginia. https://www.dhr.virginia.gov/pdf_files/Guidelines_For_Conducting_Archaeological_Survey_in_VA_June2009.pdf.
- Virginia's Legislative Information System
 2021 Administrative Code; 22VAC30-70-10, Definitions. <https://law.lis.virginia.gov/admincode/title22/agency30/chapter70/section10/>, accessed 19 December, 2023.
- Wells, Aimee and Alisa Pettitt
 2023 *Cemetery Resurvey Guide Field Maps*. CART, County Archaeology

- Research Team. Fairfax County Park Authority Archaeology and Collections Branch.
- Wells, Aimee, Alisa Pettitt, and Amanda Benge.
 2021 *Fairfax County Cemetery Survey*. CART, County Archaeology Research Team. Fairfax County Park Authority Archaeology and Collections Branch, 2-5.
- Wells, Kimberly Joyce
 1997 "Reflections of Social Change: Burial Patterns in Colonial Fairfax County, Virginia". *Dissertations, Theses, and Masters Projects*. College of William & Mary. Paper 1539626090. <https://dx.doi.org/doi:10.21220/s2-h2ry-7t21>.
- Wheatley, David
 1993 Going over old ground: GIS, archaeological theory and the act of perception. *Computing the past: Computer applications and quantitative methods in archaeology*: 133-138.
- Zigon, Jarrett, and Jason Throop
 2021 "Phenomenology". *The Open Encyclopedia of Anthropology*, edited by Felix Stein. Facsimile of the first edition in *The Cambridge Encyclopedia of Anthropology*. <http://doi.org/10.29164/21phenomenology>, accessed 16 April, 2024.