BREATHING LIFE INTO THE CEMETERY: CREATING A NEW TYPOLOGY FOR AMERICAN CEMETERIES

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BREATHING LIFE INTO THE CEMETERY:
CREATING A NEW TYPOLOGY FOR AMERICAN CEMETERIES

A Thesis
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Master of Landscape Architecture

by
Elise Holmberg Herron
May 2012

Accepted by:
Dr. Matthew Powers, Committee Chair
Mary Beth McCubbin
David Pearson
This study is an investigation into the history of the American cemetery landscape, primarily focusing on the rural garden cemetery and the memorial park typologies. The purpose is to gain a better understanding of the components and design intent of each. From this study a new typology of cemetery emerges, focused on multi-functionality, memorialization, as well as both civic and environmental interactions.
DEDICATION

I would like to extend many thanks to the Faculty in the School of Preservation, Development, Planning and Landscape Architecture for your help and commitment over the past three years. I have truly enjoyed my time back in the academic environment and all that Lee Hall has to offer. I hope to maintain relationships with so many of you long into the future.

To my classmates, I wish each of you the best! We made it through to the end, and are all still friends! I hope we keep in touch.

Last but certainly not least, I would also like to recognize my wonderful husband for his unrelenting support and understanding over the past three years. Thank you so much for pushing me to be my best, we truly accomplished this together!
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CHAPTER ONE
INTRODUCTION

Background: Context and Conditions

Definition

A cemetery is defined as a space or area where the remains of deceased people are buried in rest, either by means of a grave, commonly referred to as burial, a mausoleum, or columbarium. A cemetery is traditionally un-affiliated with a particular religion, church or denomination thereof and is considered separate from a churchyard. Although the word as we know it today originated in the late 1300’s it has both Latin and Greek roots, meaning “sleeping place” (cemetery, Dictionary.com).

A Transition Period

For the years prior to the Agrarian and Industrial Revolutions there was no real need for the modern cemetery we know today. The dead were generally buried within their selected church, either beneath the church itself or in the surrounding consecrated grounds. However, following the Agrarian and Industrial Revolutions, people moved from their small rural villages into the burgeoning industrial towns. With this huge influx of people came as many health and hygiene problems including: sanitation, drinking-water supply, waste-disposal, and burial of the dead. Additionally, “at the beginning of the nineteenth century
there were no towns in England and Wales outside London with a population of 100,000. Ninety-one years later there were twenty-three towns with populations greater than 100,000” (Curl, 1993, p.206). As a result of the poor hygiene conditions and hazardous industrial work, the average life expectancy of a industrial worker’s family was only seventeen years and that of a professional worker being only thirty years. The convergence of all three of these influences; un-healthy living conditions, the fast growing working-class population, and high mortality rates, resulted in churchyard spaces being severely inadequate and in general very overcrowded. As a result, “it was clear that a radical approach to the burial of the dead would have to be devised” (Curl, 1993, p. 206). Modern cemeteries emerged as the apparent solution (Curl, 1993).

The first hygienic models for modern day cemeteries, places where the dead would lie undisturbed and would not harm the living, emerged in Scotland, Ulster, India, Louisiana and France. The cemeteries were generally located outside the city center and took advantage of natural amenities, outstanding views and were often favorite places for recreation for the neighboring people (Curl, 1993). As a result, these cemeteries heavily influenced England and the United States as they also encountered many of the same sanitary issues within their growing cities.

The first rural cemetery in the United States was Mount Auburn Cemetery founded in 1831, just outside Boston in Cambridge, Massachusetts. Guided by both “practical and aesthetic reasons: to solve an urban land use problem
created by an increasing number of burials in the city and to create a tranquil and beautiful place where families could commemorate their loved ones with tasteful works of art in an inviting and natural setting (History, mountauburn.org)" was an instant success. By 1845 there were nine rural cemeteries throughout the United States designed using Mount Auburn as their model. People were attracted to these places and often planned family picnics and walks while on the grounds. In many ways these new cemeteries were places for the living as well as the dead (Burial Customs and Cemeteries, nps.gov). While people of all backgrounds and means appreciated the beautiful scenery and peaceful setting of Mount Auburn, rural cemeteries in general were elitist in nature and plots were often too expensive and out of reach for the less wealthy (Jackson and Vergara, 1989).

The next movement that swept the nation would happen nearly one hundred years later, in 1917, with Dr Hubert Eaton his model for what would become the Memorial Park, Forest Lawn Cemetery in Glendale, California (Jackson and Vergara, 1989). He proposed the Lawn become the prominent feature of the cemetery, introducing flush monument tablets rather than upright monuments and memorials (Jackson and Vergara, 1989). Although, slow to pick up speed at first, popularity of memorial parks swelled with the conclusion of World War Two and the general disinterest and declining importance society placed on cemeteries and monuments (Jackson and Vergara, 1989). As a result, the memorial park remains the most popularly developed model for new cemeteries in the United States today.
Problem Statement

The most common form of cemetery in the United States today, the memorial park, is a private place with the single function of interring and visiting loved ones. This process happens within a setting that offers very little privacy and consumes enormous amounts of resources. As the need for cemeteries increases and the amount of available land becomes scarcer, a new type of cemetery should be explored. Cemeteries should be beautiful, multifunctional public spaces that integrate essential principles of sustainability while allowing for more private functions such as memorializing and remembrance.

Study limitations

This study focuses on rural garden cemeteries rather than the more typical and widespread suburban memorial gardens. Many studies suggest a future rise in the number of memorial parks in rural areas due to the rising cost of real estate and more stringent land use requirements. However, very few existing studies have addressed the rural garden type of cemetery. Rural garden cemeteries embody attributes that could be more readily transformed into sustainable, multifunctional public places, a central focus of this study. As such, developing a new paradigm of cemetery that builds upon the rural garden concept will ensure that cemeteries in rural landscapes are beautiful, multifunctional, and publically oriented – characteristics that are not typically associated with the common memorial park.
Suggested Solution

This study created a new model for modern cemetery design. It intends to once again return the cemetery to the living, in an attractive and meaningful way. It proposes that through better design these spaces can remain relevant for long after they are filled to capacity; that while they serve a primary focus as a final resting place, they also serve the living as a place for passive recreation, wildlife sanctuary and preservation of open space. These spaces could also incorporate elements of sustainability not only in the design but in the internment of the dead.

The design includes several important features, some new and some old, which have been lost over time. Multiple examples through the literature review and following case studies expand and define these important design elements and their necessity to the next model of the American cemetery.

Research Questions

In the next pages the following questions will be examined and answered through the Literature Review and Methodology sections of the document.

1. What are the different typologies of the American of cemeteries?
2. What are the significant elements of each typology?
3. Were elements or characteristics added or deleted through the transition from the church graveyard to the memorial park cemetery?
4. What is the reasoning they have been eliminated from modern day design?
5. What deleted elements from this transition should be re-incorporated into modern cemetery design?
6. Where were these elements most successful and why are they preferred?

7. What are the added benefits to the local community if these elements are introduced?

Significance

This study of the evolution and development of a recombinant cemetery design is important to meet future needs related to developmental pressures, aesthetics, sustainability, and public use. Multifunctional spaces, such as the one proposed in this study, would combine uses and provide a place for more people to enjoy. Quality green space will be of upmost importance as the current development pattern takes shape into a more urbanized and dense environment. Spaces like this can contribute not only to the overall health of the people that are able to enjoy them, but also the flora and fauna that would inhabit the areas.

Organization

From here, this study explored the evolution of the cemetery from the rural cemetery movement to the memorial park in the Literature Review section. It serves to expose the reasoning and rationale behind the development and transition between these two types of cemeteries.

In the Methodology section the characteristics of each typology were further examined and evaluated for their applicability to a new type of cemetery.
As a result, a set of design guidelines are listed for the development of a new type of cemetery.
CHAPTER TWO
LITERATURE REVIEW

Body of Knowledge 1: Cemetery Design

Types of Cemeteries

There are many different types of cemeteries throughout the country. This section names, categorizes, and defines the general types of cemeteries. Some groups are known by several names, and where applicable all names have been listed.

Church Graveyards

Parishes and churches of the late 18th century traditionally buried the dead within walls and under the floor of the church, however over time the space was not adequate and the tradition of burying the dead in the surrounding grounds was deemed an acceptable substitution. As the church was often the center of town life so too was the graveyard. Residents were reminded in a daily passing of the church yard the “transitory nature of human life (Jackson and Vergara 1989)(Silent Cities, 10).” This is evident in the most common epitaph of the time, “Where you are now, so was I. Where I am now, so will be you (Jackson and Vergara 1989)(Silent Cities, 10).”

 Eventually, these areas too were out grown and seen as unkempt and foul smelling sections of town. By the mid-1800’s, Public Health reformers recognized
the crowded cemeteries as the source of disease. As a result, by the end of the Civil War, most cemeteries were moved outside of the city limits (NPS.gov).

Country Graveyards

Not all early American cemeteries were associated with the church. There are many examples of country graveyards that dot the rural landscape alongside highways and back country roads. These are very simple burial grounds that are usually unfenced and open on a small piece of property. The grave markers are simple in nature and could simply be a stone to mark the grave (Jackson and Vergara 1989).

Veteran’s Cemeteries or Military Cemeteries

National cemeteries were established for the burial of honorably discharged veterans and their families. There are just over 110 veteran’s cemeteries in the US. They are characterized by the traditional white markers uniformly laid out across the landscape (Silent Cities, 25). Probably the best known example is Arlington National Cemetery, just outside Washington, DC.

Monumental Cemeteries or Ordinary Urban Cemeteries

These by far are the least documented of the cemetery typologies. They are places where economics precede aesthetic appeal. “The street plan tends to be unimaginative and rarely follows the contours of the land.”
In crowded urban cemeteries, the markers overtake the landscape and they can be seen as field of stone where they were called “petrified forests.” These are some of the most difficult to maintain because of the density and numerous repairs that are needed (Jackson and Vergara 1989).

Family Cemeteries

As extensive plantations were established to facilitate the production of large scale cash crops, such as tobacco, several factors often made burial in a churchyard problematical: towns were located far apart, geographically large parishes were often served by only a single church, and transportation was difficult, the major mode being by ship. The distance of family plantations from churches necessitated alternative locations for cemeteries, which took the form of family cemeteries on the plantation grounds. They usually were established on a high, well-drained point of land, and often were enclosed by a fence or wall. Although initially dictated by settlement patterns, plantation burials became a tradition once the precedent was set. Along with the variety of dependencies, agricultural lands, and other features, family cemeteries help illustrate the degree of self-sufficiency sustained by many of these plantations. (NPS.gov)

Potter’s Fields

The most informal typology is the potter’s field. No names are associated with the dead in these places. Groups of unknown and homeless dead are buried
together in a mass grave usually in a pine box stacked 3 deep. No service is preformed prior to burial (Jackson and Vergara, 1989).

Prison Cemetery

A prison cemetery is a cemetery reserved for prisoners. Generally, the remains of inmates who are not claimed by family or friends are interred in prison cemeteries and include convicts executed for capital crimes (Jackson and Vergara 1989).

Neglected Cemeteries

Whenever a cemetery runs out of land for burial, its revenue runs out drastically, even as maintenance costs remain the same. If a perpetual care fund is not in place, there is no money for regular maintenance and the cemetery falls into neglect. Monuments and graves can be vandalized without supervision. The space could easily turn into a dump or place for shady deals out of the watchful eye of a supervisor or property manager since they are usually located in remote areas (Jackson and Vergara 1989).

Finally, are the two most common and recognizable types of cemeteries, the rural garden cemetery and the memorial park. This study has chosen to focus on these two types of cemeteries for their contrasting ideology and differences in landscape form.
Rural Garden Cemeteries

These elaborate and often picturesque cemeteries are the direct opposite of the church graveyards and were created in response to the health concerns they posed. The American “garden” or “rural” cemetery movement began in 1831 with the creation of Mt. Auburn Cemetery in Cambridge, MA (Silent Cities, 18). Created as a “planned oasis”, complete with winding paths and deep shade, all within a natural setting. It was quickly labeled a success and similar designs appeared across the nation near the largest cities including, San Francisco, Santa Barbara, St. Louis, and Philadelphia.

In the United States, the "rural" cemetery movement was inspired by romantic perceptions of nature, art, national identity, and the melancholy theme of death. It drew upon innovations in burial ground design in England and France, most particularly Père Lachaise Cemetery in Paris (NPS.gov)

Based on the model of Mount Auburn Cemetery, founded at Cambridge, near Boston by leaders of the Massachusetts Horticultural Society in 1831, America’s "rural" cemeteries typically were established around elevated viewsites at the city outskirts. Mount Auburn was followed by the formation of Laurel Hill Cemetery in Philadelphia in 1836; Green Mount in Baltimore, 1838; Green-Wood Cemetery in Brooklyn and Mount Hope Cemetery in Rochester, New York, in 1839; and ultimately many others. (NPS.gov)

The evolution of burial customs and memorializations also can be an important context for understanding our history. In the 19th century, romantic
appreciation of nature and changing attitudes about death and memorialization led to gradual abandonment of overcrowded urban graveyards and church cemeteries in favor of spacious, landscaped burial grounds on the city outskirts. The great "rural" cemeteries outlying major cities in the eastern United States and the Midwest were founded by voluntary associations in the 1830s and 1840s. Their popularity inspired a benevolent movement, led to the development of urban parks, and was the foundation of an entire industry (NPS.gov).

Memorial Parks or Lawn Cemeteries

In 1917, Dr. Hubert Eaton began what would become the first memorial park, Forest Lawn. He envisioned “… a great park, devoid of misshapen monuments, and other customary signs of earthly death, but filled with towering trees, sweeping lawns, splashing fountains, singing birds, cheerful flowers…” (Silent Cities, 29).

Following its creation many cemeteries were designed using Forest Lawn as a guide. However, some people were not in favor of its modern interpretations of death, preferring instead the more traditional above ground memorials. It was not until the end of World War II that it became the dominant type of funerary landscape (Jackson and Vergara, 1989).
Evolution and Transition between Typologies

Rural garden cemeteries emerged as the first type of cemetery following the church graveyard and focused primarily on creating beautiful, healthy and unique places for memorialization. They left behind the overcrowded and haphazardly organized graveyards surrounding local churches.

Rural garden cemeteries were formally designed by professionals of the time to take advantage of the natural variations and amenities offered by the site, often inspired by the English Landscape School. As a result, the paths are dictated by the landscape and generally take a winding or meandering course. Plots or groups of plots were sold on an individual basis and allowed for personalization and individual memorials within the lushly landscaped terrain. These monuments often took the shape of ornamentally designed and intricate headstones or statuaries (NPS.org).

As trends and tastes of the general public shifted, especially after World War Two, so did the design of cemeteries and we moved from the rural garden cemetery to the memorial park type of cemetery (Jackson and Vergara 1989)

Memorial Parks are primarily designed with economy in mind. Unique monuments are no longer allowed. Generally, a uniform size, shape and material of headstone is required and provided, for a fee, from the institution. It would be mounted flush with the surface of the ground to allow for ease and lower cost of maintenance. Both plot and circulation patterns followed suit, where they once curved to accommodate the natural topography, they have been straightened out
to maximize the number of plots a site could accommodate. As a result, vast lawns would replace groups of trees or shrubs (Jackson and Vergara 1989).

**Body of Knowledge 2: Memorialization**

*A Place to Visit*

Cemeteries are first and foremost places of remembrance. They provide a physical and permanent focal point for memorialization of the dead, which can be important to both the deceased, wanting to be remembered, and the living, providing a dignified resting place for the deceased. Additionally, they “serve an important emotional function for survivors by helping to bring closure and allowing the healing process to begin” (Questions, iccfa.com).

*Fostering Local Identity*

Cemeteries are special places within the community and can serve as a local ledger of its past citizens, events, and cultural heritage, especially if they remain active over a long period of time.

**Body of Knowledge 3: Interactions and Systems**

*Preservation of Habitat*

Cemeteries can be ecologically significant places and have the ability to be more than just a place to bury the dead. They can serve as natural areas or habitat with the ability to foster biodiversity and provide refuge to wildlife including
endangered species. While older cemeteries, such as those designed in the rural garden, more easily provide these oases for wildlife due to their age and design style; new cemeteries could provide the same services to wildlife if it was established as a design goal from initial concept (Dybas, 2003).

Planting Selections

When new cemeteries are planted with native and or non-invasive species provide many benefits to the management of the cemetery and the surrounding local community. Native species provide recognizable food and shelter to the wildlife and promote healthy populations. They are also more tolerant and better adapted to the areas climate, soil conditions and rainfall. Native plants also reflect the local identity of the place. Visitors are able to recognize and have a connection with local species of trees, shrubs and wildflowers further adding to the importance of the space (Dybas, 2003).
CHAPTER THREE
METHODOLOGY

Introduction

This chapter addresses the method used to collect data comparing and contrasting the rural garden cemetery and the memorial park cemetery. The reader will be introduced to the steps taken in order to achieve this goal and the resulting knowledge that was gained from the procedure.

Research Orientation

This study uses a single method approach to gain insight and knowledge on the topic. By examining examples of both typologies of cemeteries through case studies, each type can be evaluated using the same standard of evaluation. While extensive personal interaction and occupancy surveys at each case site would have enhanced the breadth of the study, it was not an option at the time of the research.

Data Collection Procedures

As stated above, this study has chosen to use the Case Study Method to explore this topic. The method was selected for its ability to explore complex issues and give a greater understanding to the topic. Each case was evaluated using the following criteria, timeline of development, context, background and
history, the genesis of project, management and maintenance, and finally, user and use analysis. Special attention was to these elements and how they were used to breathe life into the cemetery with their design elements, interactions and forms of memorialization.

Data Analysis

The data was organized as a compilation of information in the form of lists under the same sub-headings for easy comparison.

Case Study: Mount Auburn Cemetery, Cambridge, MA

Project Background and History

Just prior to Mount Auburn’s development, society’s ideas about death, burial and nature were changing. In 1825, Jacob Bigelow, a Harvard physician and botanist, proposed the idea of a rural cemetery, located outside of the Boston’s city center. By 1831, the Massachusetts Horticultural Society purchased seventy-two acres in Cambridge, MA, the land on which the cemetery currently occupies, for six thousand dollars in Cambridge. Due to interest and availability, the cemetery was enlarged to one hundred and seventy-four acres (History, mountauburn.org).

Mount Auburn’s location was partially selected for its dramatic valleys, hilly terrain, picturesque water features, and diverse woodlands. All of these attributes
presented rich opportunities for the shaping and designing of the new garden cemetery (History, mountauburn.org).

Initially, General Henry A. S. Dearborn, president of the Massachusetts Horticultural Society, worked with Jacob Bigelow, Alexander Wadsworth, and George Brimmer in the design of Mount Auburn. These men recognized and embraced the existing natural environment and organized the circulation and overall aesthetic of the Cemetery using English landscape design principles (History, mountauburn.org).

The resulting cemetery design addressed several design issues while creating a new place of burial which provides a beautiful rejuvenative landscape, natural setting, and substantial architectural buildings and monuments.

*Maintenance and Management*

Mount Auburn imposes several restrictions concerning the grounds and plot maintenance and adornment in order to maintain the historical integrity of the site. They are listed below.

1. One metal vase per plot is allowed and will be provided by Mount Auburn staff. All others are not allowed and will be removed.

2. Flowers adorning graves should be cut flowers, bouquets of natural plant material, potted plants, or baskets of flowering plants. These are allowed at any time but will be removed when no longer fresh or become unsightly.

3. To maintain the appropriate pallet of planting material on site, all in-ground plantings should be coordinated with and preformed by the Mount Auburn horticultural staff.
4. Large planters, hanging baskets, glass, china, jars, bottles, and tin cans are prohibited and subject to immediate removal.

5. From December 1 to March 31, wreaths, baskets, or sprays of natural evergreens and/or dried plant material or fabric flowers appropriate to the Holiday Season are permitted as tributes. All unsightly or artificial tributes will be removed.

6. At all times throughout the Cemetery any toys, knickknacks, pinwheels, balloons, crockery, glassware, shells, boxes, vigil candles, plastic containers, and similar ornaments or articles are prohibited and will be removed immediately.

7. The use of wires or plant stands to hold pots or flowers upright is not allowed.

8. Flags are permitted during Memorial Day, Flag Day, Independence Day, and Veteran’s Day and will be removed the following week.

User and Use Analysis

While Mount Auburn continues to be an active cemetery, routinely accommodating burials, it also provides services for several other user groups, serving over 200,000 visitors each year (History, mountauburn.org). Visitors can expect a variety of experiences including tours, educational sessions, or special events such as weddings or art exhibit openings. The visitor's center is staffed year round and a calendar of events, located on their website, is dotted with different group meeting times or special lectures. Mount Auburn also boasts a large collection of historic documents related to the Cemetery, and by extension, the local communities of Cambridge and Boston. Visitors are welcome to search within the collections to perform any research.
Figure 1, Mount Auburn Cemetery Master Plan, Cambridge, Massachusetts
Case Study: Forest Lawn Cemetery, Glendale, CA

Project Background and History

Forest Lawn Memorial Park is a privately owned cemetery in Glendale, California and was the first of many within the chain of Forest Lawn Cemeteries developed in Southern California. It is acknowledged as the first of its kind, the “memorial park” typology. Dr. Hubert Eaton, while not one of the original developers, is credited as being founder of the cemetery due to his contributions and innovations to the cemetery’s design. Notably, Easton proposed the headstones be flush with the ground and that there be an on-site funeral home for services. Eaton envisioned a great park of vast lawns and perfectly manicured landscapes filled with beautiful works of art meant to uplift and inspire visitors (Visitors Guide, forestlawn.com).

Maintenance and Management

Detailed guidelines and restrictions are located on their website www.forestlawn.com/Visitors-Guide. A copy of this list of expectations is found below.

1. Please respect the privacy of people who are attending funerals or visiting family memorials.

2. Please avoid walking across interment sections except to visit interment spaces. Walk with care around memorial tablets, lawn vases and sprinkler heads.
3. Please ensure that children under 16 years of age are accompanied by an adult.

4. Picnicking and lying down on lawns or benches on the grounds are prohibited.

5. Loitering is prohibited.

6. Pets are not allowed on the grounds or in the buildings.

7. Feeding or disturbing birds is prohibited.

8. Please be careful not to damage trees and plants or pick flowers.

9. Smoking is not allowed in any of the buildings.

10. Only fresh cut flowers are permitted for placement on gravesites.

11. Please place potted plants no larger than eight inches in diameter or one gallon in volume on tablets or vases (in order to protect the grass).

12. Please limit placements to no more than three per interment space.

13. Cut flowers will be removed in approximately five days.

14. Funeral flowers will be removed in approximately three days.

15. Ornaments, borders, fences, planter boxes, balloons, spinners, statues, stones, or other items which do not conform to the rules and regulations of the Forest Lawn Memorial-Parks are not permitted. All placements not conforming to these rules will be removed. *Artificial flowers are permitted at the Cathedral City location only, due to extreme climate conditions.

16. Drive your motor vehicle at a safe speed, not exceeding the posted speed limit.

17. Please turn down your radio so that the sound cannot be heard outside the vehicle.

18. Please avoid parking in front of an open interment site unless you are part of a funeral procession.

19. When parking on a hill or grade, turn your wheels safely into the curb, and be sure to set the parking brake.
20. All photography (still or video) inside buildings is prohibited, except at funerals, weddings, and other private services with the consent of the person(s) in charge.

21. No commercial or professional photography is allowed under any circumstances without the express written consent of Forest Lawn.

22. No wedding photography in connection with weddings held outside the Forest Lawn Memorial-Parks is permitted anywhere on the premises.

23. Please be particularly careful when walking on slopes, damp grass, or grass covered with pine needles as they can be very slippery.

24. After sunset, please stay within lighted areas.

25. When you leave your car, lock it and take or conceal any valuables.

26. This facility contains one or more chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

Use and User Analysis

Forest Lawn Glendale’s primary function is that of a cemetery and its onsite services are focused on accommodating those visiting the cemetery for the associated reasons: funeral services, visiting a loved one’s resting place or preparing and planning a service. Recreational visitation or sightseeing is generally limited to those interested in visiting a celebrity’s grave. Some art exhibits and holiday celebrations draw visitors to the cemetery but are generally held within the museum or chapels on site. Outdoor recreation is greatly limited by the restrictions set forth by the Cemetery administration as is seen in the guidelines listed above (Visitors Guide, forestlawn.com).
Case Study: Ramsey Creek Preserve, Westminster, SC

Project Background and History

Memorial Ecosystems Inc. opened Ramsey Creek Preserve in 1998 as the first “green cemetery” in the United States with the intended purpose of saving and restoring significant amounts of native woodlands. Developed by Dr. George William Campbell, MD, Ramsey Creek aspires to be the standard to which other green cemeteries are built by being: convenient, economical, beautiful, environmentally responsible, and the mainstream alternative to existing memorial parks (Conservation Burial, memorialecosystems.com).
**Maintenance and Management**

Ramsey Creek allows only natural burials which adhere to the following standards (Conservation Burial, memorialecosystems.com).

1. No embalming fluids are allowed.
2. Biodegradable caskets should be made from cardboard, wood or other natural materials.
3. No vaults are allowed.
4. All graves should be hand dug if site permits.
5. Grave markers are not required, but an indigenous stone found on site or one consistent with the geology of the site may be used. Trees, shrubs, or wildflowers appropriate to the site may be used as well. All plantings should be coordinated with administration prior to installation.
6. Names and dates of the deceased are permitted on gravestones. All other artwork must be approved by the administration.

**Use and User Analysis**

Ramsey Creek was designed to incorporate and take advantage of the natural topography of the site. A series of interconnected trails and loops allows the visitor access to a variety of areas while visiting the preserve. Pavilions and other architectural structures are located along the trails to provide areas for contemplation or rest. An area dedicated to picnics or gatherings is located near the entrance of the preserve as is a visitor's information center. However, Ramsey Creek is limited in its breadth of user activities. Its main goal is to preserve and conserve land resources and provide wildlands for native plants and animals (Conservation Burial, memorialecosystems.com).
Figure 3. Ramsey Creek Preserve, Westminster, South Carolina
Conclusions

These three case studies have helped to explore the similarities and differences between the rural garden cemetery and memorial park cemetery typologies. Each case was instrumental in developing and creating the design guidelines that are explained in the next chapter. Syntheses of the lessons learned in relation to the overall themes of the new typology can be seen in the following paragraphs.

Places of Memorialization/Reverence/Remembrance

Cemeteries are places for visitors to think about and remember loved or lost ones. They should be able to do so without competing for space with other functions. In order to accomplish this, the entry should serve as a threshold to a special place and alerts visitor to a change of location. It should also evolve and lead the visitor from a very public to more private places. Circulation, both vehicular and pedestrian, should accentuate or enhance the visitors experience not detract from it. Landscape buffers should be designed adequately around roadways and pedestrian circulation to allow for intimate settings within the landscape.

Multifunctional and Publicly Oriented

The following elements are examples of activities appropriate for the cemetery setting to maintain a sense of reverence in the space: walking, wildlife viewing, picnicking/lunching, resting, outdoor and indoor events, exhibits, educational
experiences, and historical interpretation. Special attention should be placed on incorporating resting points, nodes, way-finding on the grounds, and access to the fabric of the community. Dedication or creation of areas or zones within the whole for specialized purposes including: buildings (Administration), chapels (Services), gardens (to attract wildlife and civic enjoyment), ponds (to attract wildlife and civic enjoyment), woodlands (to attract wildlife and civic enjoyment), lawns (for civic enjoyment).

Interactions and Systems

Multifunctional spaces are innately sustainable and by incorporating multiple uses the space required for all the activities is lessened. By implementing multiple uses the space can remain a viable and active part of the community. For the site to gain ecological sustainability it is important use the natural topography and elements of the landscape, protect and provide habitat for native wildlife and select diverse and native species for plantings. Benefits include increased wildlife on sure and a reduction in irrigation and water consumption.

Allowing for natural cycles of decomposition in regards to the burial process using "green burial" techniques adds another layer of the sustainability to the project. Additionally, the use of local stones or native plantings as grave markers would replace the traditional polished upright or flush monuments to further enhance the natural beauty of the site.
CHAPTER FOUR
RESULTS

Design Guidelines

The guidelines listed below are the synthesis of research and analysis found in the literature review and case studies sections of this study. They are prescriptive in nature and should be followed in order to create beautiful, multifunctional, ecologically sensitive, and civically engaged spaces that provide for the sensitive burial and remembrance of the dead.

_Cemetery Design: Multifunctional and Publicly Oriented_

Provide spaces for and associated with funeral services as well as civic recreation; including but not limited to walking, wildlife viewing, picnicking, resting, and events. (Literature Review and Case Studies)

Provide multiple connections to the surrounding community and fully integrate with the surrounding fabric. (CS)

_Places of Memorialization/Reverence/ Remembrance_

Provide small niches or seating options for visitors in all burial areas. (Literature Review and Case Studies)

Create a significant gateway entry to signify the transition from one type of the public realm to another. (LR)

Create additional threshold features to signify the transition from the public realm to more private locations. (LR and CS)

Create circulation patterns that follow the natural contours of the land and enhance the visitors experience within the space. (LR)

Provide adequate buffers from roadways and pedestrian circulation for within the landscape. (LR and CS)
Interactions and Systems

Create spaces that incorporate multiple uses simultaneously. (Literature Review and Case Studies)

Use best management practices when manipulating existing elements of the site, including topography, existing vegetation, views and water elements. (LR and CS)

Planting selections should include a majority of native and non-invasive species selected for their special adaptations for the site. (LR and CS)

Use a large variety of native and non-invasive species that provide either or both protection and food sources for a variety of wildlife species. (CS)

Provide spaces or sections of the cemetery for the natural or green burial options. (CS)

Using found stones on the site for headstones/ grave markers or other forms of marking such as a native planting and/or selecting a site with naturally definitive feature. (CS)

Caskets should be made from natural and biodegradable materials. (CS)
CHAPTER FIVE

DESIGN APPLICATION

Site Analysis

Location: Heritage Memorial Gardens
4500 South Highway 11
Westminster, SC 29692

Heritage Memorial Gardens Cemetery was selected as the site for the application of the design guidelines set forth previously in this document. It is an active cemetery located in Oconee County, South Carolina in the rural town of Westminster. The site is found in the center of the county and the three largest cities in the county, Walhalla, the county seat, Seneca and Westminster. The site is a total of eighty-five and seven-tenths acres. Approximately twenty-two acres are developed as a cemetery and support structures. The remainder of the site has been left in its natural state of pasturelands and deciduous timberland. The pastures are currently leased for cattle production, but plans for cemetery expansion into these spaces have been made for the future.

While the site is currently located in a rural area of the state and not a larger more densely populated area it is still a viable location to explain and represent the design guidelines that were established previously.
Figure 4, Site Plan and Locator Maps
Heritage Memorial Gardens, Westminster, South Carolina

Figure 5, Developed Areas and Surrounding Land Use
Land Use Diagram
The site is surrounded by hardwood forests and one small tract of commercial property

Figure 6, FEMA Floodplain
The floodplain as outlined by FEMA shows that much of the site is susceptible to flooding due to the stream on the northern edge of the property

Figure 7, Site Topography
As is typical for the piedmont region of South Carolina, the site has a varied topography with gently rolling hills and shallow valleys.
The site is surrounded by rolling hills and forested areas. The developed areas of the cemetery have been sparsely planted with a maples, crape myrtles, and leyland cypress trees.

A formally landscaped entry to the cemetery is demarked with a stone and metal gate-style entry. Plants seen here are indicative of the entire plant palette used on the developed property.

The temporary office and administration building sits in a prominent location on the site and is partially hidden from the cemetery by the wall of leyland cypress trees. This section of the cemetery is reserved for upright memorials. The roadway divides the developed and un-developed sections of the site.

Sections of the cemetery are not easily located or demarked due to the lack of identifiable landscape changes or wayfinding.
**Un-developed Areas**

Figure 12, Site panorama of existing water elements and vegetation
The site is surrounded by rolling hills and forested areas. The un-developed areas of the site have been maintained in their original capacity as pastures for cattle and woodlands.

Figure 13, Site panorama highlighting the natural woodland vegetation
An opening in the woodlands reveals a rolling meadow entirely contained within the woods creating a peaceful and inviting area for visitors to mingle and play.

Figure 14, Site panorama highlighting the natural topography
The rolling hills and valleys of the sight provide many opportunities for tree covered winding pathways and open areas for gardens and passive recreation.

Figure 15, Site panorama highlighting the openness of the deciduous woodlands
The openness of the woods allows visual access to the area and creates opportunities to draw the visitor deeper into the site and fully explore the spaces offered to the user.
Site Attributes

The site has both positive and negative existing attributes that will be accentuated or deemphasized when addressed in the Master Plan. Positive attributes include, but are not limited to, abundant wildlife, large areas of undeveloped timber and pasture, as well as pastoral vistas to neighboring properties. Negative attributes include, but are not limited to, structures that remind visitors of the temporary nature of the management, limited diversity in the planting materials and inappropriately placed furniture placed by visitors.

Figure 16, The positive and negative attributes of the site
Concept and Inspiration

In addition to the case studies discussed earlier in this study, two works in particular influenced the design for Heritage Memorial Gardens, The Woodland Cemetery in Stockholm and the Aoyama Cemetery in Tokyo. Design intent as well as elements from each design can be seen in the final master plan.

*Figure 17, Skogskyrkogården: The Woodland Cemetery, Stockholm, Sweden*

**Precedent: Skogskyrkogården: The Woodland Cemetery, Stockholm, Sweden**

The Woodland Cemetery in Stockholm, Sweden is a UNESCO World Heritage Site noted for its significance as a cultural landscape from the twentieth century. The design takes advantage of the natural topography and woodland setting to create a cemetery that blends the natural environment and built form into a seamless whole (New Thinking, skogskyrkogarden.se). The Woodland Cemetery is open year round to visitors and has a visitor’s center where you are
able to schedule tours and learn about the cemetery and its history and importance. Connecting the site to the city is a metro stop is located just outside the entry to the cemetery.

![Figure 18, Aoyama Cemetery, Tokyo, Japan](image)

**Precedent: Aoyama Cemetery, Tokyo, Japan**

Aoyama Cemetery is located just outside the heart of Tokyo and is one of the largest cemeteries in the city at 64 acres. The lushly planted oasis of trees, particularly the cherry tree, attracts residents and workers from the surrounding neighborhoods to use the cemetery as a park. Visitors are often seen eating lunch or meeting friends in the cemetery for a walk. While there is vehicular traffic crossing the site, visitors are not deterred from entering and regularly walk alongside the traffic.
Design Process

**Functional Diagram**

The functional diagram explains the different uses and their relationships to one another.

**Circulation Diagram**

The circulation diagram explains the vehicular and pedestrian circulation patterns within the site.

**Spatial Relationship Diagram**

The spatial relationship diagram further explores the site and the connections between the spaces. Planting design and materials are developed in order to fully understand these relationships.
Master Plan

The Master Plan showing the designated areas labeled with a corresponding number to explain the use of the area. Each section will be discussed in more detail in following images.
Figure 23, Revised Spatial Relationship Diagram

This final diagram illustrates the combination of all the previous diagrams overlaid on the Master Plan to fully explain the sections of the plan and the relationship between the spaces.
Figure 24, Enlarged Master Plan highlighting the entry and public elements

Starting at the new architectural entry feature to the cemetery, visitors are aware of the transition from the public realm of the surrounding farms to the eloquently designed Entry Pavilion. This area introduces the visitor to the site and helps orientate them with the amenities available to them. The Administration Building and Chapel are easily recognized and direct the visitor to the parking, located behind the buildings. Information about daily activities and scheduled events are available at both of these locations. Tours and directed events would meet at in this area as it serves as the main hub and gateway for public engagement on the site. Access to the water gardens, event lawn, pond and wildflower meadow begin in the entry pavilion.
The water gardens take advantage of the natural flow and collection of water on the site, providing valuable habitat, housing and protection for many different plants and animals. The plantings along the water’s edge would be a selection of native and or non-invasive species that would help diversify the planting palette. Winding paths surround the water gardens allowing the visitor to interact with the landscape in a personal way. Resting points would be dotted throughout the network of paths providing places for rest and quiet contemplation. The retention pond on site would be modified to create a more naturalistic pond setting. Paths would surround the area and connect to the larger network of paths leading the visitor in a variety of directions and locations.

On the other side of the Entry Pavilion is the Wildflower Meadow which is located in what is currently a pasture. Preserving this open space provides contrast to the wooded areas that will cover much of the site as it is returned to its natural cover of deciduous forest. Paths mowed in the wildflowers draw the visitor into the space and immerse them in the natural surroundings.
The western section of the cemetery is primarily the woodland cemetery. The native deciduous trees of the area are highlighted and accentuated within this area by keeping monuments small and discrete. Paths provide pedestrian circulation around and through the area bringing the visitor to the Bog Garden and the Open Meadow. The Bog Garden is located in the flood plain and is regularly filled with water after heavy rains. Visitors would keep to an elevated trail so to enjoy this unique garden area. Planting would include native and non-invasive species. The existing Open Meadow is a breathtaking clearing in the woods. The space is entirely contained within the forest and provides a very
peaceful and reflective area for visitors. The sunny opening is a nice contrast to the shady cooling nature of the forest.

Finally the original area of the cemetery is redesigned to follow the design guidelines set forth in the other sections. The general space would be populated with many more trees of varying species. The general circulation of the area remains the same due to the existing gravesites, but incorporates resting places for visitors and formal plantings of flowers for placement at gravesites. Extensive vegetative buffering along the property serves as a visual and auditory screen from the traffic along highway 11.
CHAPTER SIX
CONCLUSIONS

Significance

By using these design guidelines for designing new cemeteries or redesigning existing cemeteries we are able to create places that are designed for multiple uses and users in order to extend the usefulness of the space well beyond its capacity as a cemetery as well as demonstrate the need for a more sustainable model of cemetery design. By incorporating and re-introducing the reasoning and design intentions of historic cemeteries, primarily from the Victorian Era, we are able to provide spaces for people, wildlife and flora to interact with one another. This promotes a healthy lifestyle and connection to nature as well as the surrounding community.

This application explores an underserved area of potentially sustainable landscape design and highlights the importance of incorporating design professionals, specifically landscape architects, in this field.
REFERENCES


