

DESIGNING CEMETERIES FOR PERSONAL EXPRESSIONS
IN THE SAN FRANCISCO BAY AREA

by

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The death of a loved one is a deeply painful experience. Beginning at the young age of 10 years old, I have dealt with the grief and sadness that accompanied the several deaths of close loved ones throughout the years. The cemetery has been a place for me to mourn and grieve. The open space to run around in as kids, the trees, the birds in the sky, the fresh air, and the family gatherings that the cemetery facilitates have provided for me a landscape for healing. I understand the power of a cemetery's impact on a human being going through the pain of death and have been intrigued by this type of landscape ever since. I am grateful for the guidance and support of my supervising committee in helping me pursue this topic that is intrinsically meaningful for me.

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This journey has been long and my wife, Geline, has been by my side the entire time. I would like to thank her for bravely bringing our son, Kaio, into this world during this process. She has managed to keep our family strong as she allowed me to focus on finishing this degree and achieving this dream of mine.

Lastly, I would like to dedicate this to my late grandfather, Emerito Surio (1927-2020) and to my grandmother, Florfina Surio. Their love for plants and gardening have inspired me to become a landscape architect someday.

ABSTRACT

DESIGNING CEMETERIES FOR PERSONAL EXPRESSIONS IN THE SAN FRANCISCO BAY AREA

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Our country's largest cities have become more racially and ethnically diverse than they were in 2010 (US News, 2020). Differences are present and yet, our cemeteries, originally catering to a predominantly Caucasian market (Sloane, 1991), remain Eurocentric in design (Jones, 2011). The purpose of this master's design thesis is to determine the design principles and elements necessary for a cemetery that is transformed by the personal expressions exhibited by visitors after the day of burial. The study focuses specifically on cemeteries in the San Francisco Bay Area. The findings were used to develop a new kind of cemetery typology that aims to have cemetery design be led by behavior, activities, rituals, and traditions of its users rather than being led solely by the personal and business preferences of cemetery designers and professionals.

This study utilizes qualitative research methods (Sommer & Sommer, 2002) beginning with a literature review to see what issues may be addressed by this study and to gain insight on how to improve cemetery design (Sommer & Sommer, 2002). Data

collection began with initial site visits to cemeteries that included notes derived from photo documentation and casual observation (Sommer & Sommer, 2002). Case study sites were then selected from these initial visits to conduct systematic observations in using tally sheets and ethnograms/observation sheets (Sommer & Sommer, 2002).

Adopting the case study pattern used by Marcus and Francis in their book, *People Places* (Marcus & Francis, 1998), the gathered data was analyzed and synthesized to reveal insights on the successful and unsuccessful features in cemetery design as it relates to personal expressions, sufficiently informing the researcher in developing the final non-sectarian cemetery design (Simonds & Starke, 2006) adapted for the city of Oakland.

The design concludes the study and addresses the findings on the design features and elements that conflict with personal expressions such as lack of delineation, missing features and elements for a gathering space, conflicting rules, and inaccessibility. The design also reflects the design features and elements that encourage personal expression such as the gravestones designed as and for personal expression, vertical elements, and personal maintenance.

The knowledge produced from this research contributes to the field as it aids landscape architects in creating inclusive cemeteries that encourage personal expression of its users. These landscapes have the potential of not just ameliorating the pain of death, but also providing the opportunity for cultural preservation and meaning.

TABLE OF CONTENTS

ACKNOWLEDGMENTS	I
ABSTRACT	III
LIST OF FIGURES	VIII
LIST OF TABLES	X
CHAPTER 1: INTRODUCTION	1
1.1 Background	2
1.2 Problem Statement.....	4
1.3 Purpose of Research.....	5
1.4 Research Questions	5
1.5 Definition of Key Terms	6
1.6 Research Methods	7
1.7 Significance and Limitations	8
1.8 Delimitations.....	10
1.9 Summary.....	10
CHAPTER 2: LITERATURE REVIEW	12
2.1 The Evolution of Cemetery Typology	12
2.1.1 The Cemetery Emerges.....	12
2.1.2 The Rural Cemetery.....	13
2.1.3 The Lawn-Park Cemetery	14
2.1.4 The Memorial Park	15
2.2 Changing Relationships with Death in the United States	16
2.3 The Cemetery as a Place of Cultural Identity.....	18
2.4. Personal Expression as a Means for Healing	20
2.5 Summary.....	22

CHAPTER 3: METHODOLOGY	23
3.1 Research Design	23
3.2 Study Population and Location	26
3.3 Data Collection	26
3.3.1 Phase 1: Initial Cemetery Site Visits	26
3.3.2 Phase 2: Case Study Site Selection.....	29
3.3.3 Phase 3: Case Studies	29
3.4 Data Analysis	30
3.5 Bias and Error	31
3.6 Design Process	31
3.6.1 Site Selection.....	31
3.6.2 Site Analysis	32
3.6.3 Conceptual Design	32
3.6.4 Schematic Design.....	32
3.7 Summary.....	33
CHAPTER 4: ANALYSIS AND FINDINGS	34
4.1 Phase 1: Initial Cemetery Site Visits	34
4.1.1 Chinese Cemetery	36
4.1.2 Italian Cemetery.....	42
4.1.3 Woodlawn Memorial Park	46
4.1.4 Greek Orthodox Memorial Park	56
4.1.5 Mountain View Cemetery	58
4.1.6 Oak Hill Memorial Park	60
4.1.7 Los Gatos Memorial Park	65
4.1.8 Gate of Heaven Catholic Cemetery.....	69
4.2 Phase 2: Case Study Site Selection	73
4.3 Phase 3: Case Study Site Visits	75
4.4 Synthesis.....	81
4.4.1 Successful Features	81
4.4.2 Unsuccessful Features	86
4.5 Summary.....	93
CHAPTER 5: DESIGN.....	95
5.1 Site Selection	95

5.2 Site Analysis.....	102
5.3 Conceptual Design and Site Design	107
5.3.1 The Master Plan	107
5.3.2 The Community Spaces.....	111
5.3.3 The Cemetery Plot Designs	119
5.4 Summary.....	127
CHAPTER 6: CONCLUSION	128
6.1 Research Questions Revisited	128
6.2 Relevance to Landscape Architecture	130
6.2.1 Inclusion	131
6.2.2 Climate Change	131
6.2.3 Cultural Enrichment	132
6.2.4 Intangible Value	132
6.3 Future Research.....	133
6.4 Summary.....	135
REFERENCES	A
APPENDIX	D
Appendix A: IRB Approval Letter	d
Appendix B: Interview Questions.....	e
Appendix C: Subject Recruitment Process	g
Appendix D: Recruitment Scripts.....	h
Appendix E: Informed Consent for Minimal Risk Studies with Adults	j
Appendix F: Confidentiality and Data Security.....	n

LIST OF FIGURES

Figure 3.1 Research Design	25
Figure 3.2 Observation Sheet/Ethnogram Template	28
Figure 3.3 Criteria Matrix for Case Study Site Selection.....	29
Figure 3.4 Systematic Observation Tally Sheet.....	30
Figure 4.1 Phase 1: Initial Cemetery Site Visits.....	35
Figure 4.2 Chinese Cemetery	36
Figure 4.3 Chinese Cemetery	37
Figure 4.4 Chinese Cemetery	38
Figure 4.5 Chinese Cemetery	39
Figure 4.6 Chinese Cemetery	39
Figure 4.7 Chinese Cemetery	41
Figure 4.8 Italian Cemetery.....	42
Figure 4.9 Italian Cemetery.....	43
Figure 4.10 Italian Cemetery.....	44
Figure 4.11 Italian Cemetery.....	44
Figure 4.12 Italian Cemetery.....	45
Figure 4.13 Woodlawn Memorial Park	46
Figure 4.14 Woodlawn Memorial Park	47
Figure 4.15 Woodlawn Memorial Park	47
Figure 4.16 Woodlawn Memorial Park	48
Figure 4.17 Woodlawn Memorial Park	49
Figure 4.18 Woodlawn Memorial Park	50
Figure 4.19 Woodlawn Memorial Park	50
Figure 4.20 Woodlawn Memorial Park	51
Figure 4.21 Woodlawn Memorial Park	52
Figure 4.22 Woodlawn Memorial Park	52
Figure 4.23 Woodlawn Memorial Park	53
Figure 4.24 Woodlawn Memorial Park	54
Figure 4.25 Woodlawn Memorial Park	55
Figure 4.26 Greek Orthodox Memorial Park.....	56
Figure 4.27 Greek Orthodox Memorial Park.....	58
Figure 4.28 Oak Hill Memorial Park	60
Figure 4.29 Oak Hill Memorial Park	61
Figure 4.30 Oak Hill Memorial Park	62
Figure 4.31 Oak Hill Memorial Park	63
Figure 4.32 Oak Hill Memorial Park	63
Figure 4.33 Oak Hill Memorial Park	64
Figure 4.34 Los Gatos Memorial Park.....	65
Figure 4.35 Los Gatos Memorial Park.....	66
Figure 4.36 Los Gatos Memorial Park.....	67
Figure 4.37 Los Gatos Memorial Park.....	68
Figure 4.38 Gate of Heaven Catholic Cemetery.....	69
Figure 4.39 Gate of Heaven Catholic Cemetery.....	70
Figure 4.40 Gate of Heaven Catholic Cemetery.....	71

Figure 4.41 Gate of Heaven Catholic Cemetery	71
Figure 4.42 Gate of Heaven Catholic Cemetery	72
Figure 4.43 Criteria for Case Study Site Selection	73
Figure 4.44 Recorded Observations	75
Figure 4.45 Top Activities/Behaviors Observed.....	79
Figure 4.46 Objects Most Left at Grave.....	80
Figure 4.47 Gravestones Designed as Personal Expressions	81
Figure 4.48 Gravestones Designed for Personal Expressions	83
Figure 4.49 Vertical Elements	85
Figure 4.50 Vertical Elements	85
Figure 4.51 Delineation	87
Figure 4.52 The Plot as Gathering Space	88
Figure 4.53 Rules Conflicting with Personal Expressions.....	90
Figure 4.54 Inaccessibility.....	92
Figure 5.55 Diversity	96
Figure 5.56 Parks: Oakland, San Jose, & San Francisco.....	97
Figure 5.57 Cemeteries: Oakland, San Jose, & San Francisco	98
Figure 5.58 Urban Displacement Map: San Francisco Bay Area.....	99
Figure 5.59 City Selected: Oakland.....	100
Figure 5.60 Site Selected: Oakland Coliseum.....	101
Figure 5.61 Sports Teams at the Oakland Coliseum	102
Figure 5.62 New Ballpark at Howard Terminal	104
Figure 5.63 BIG's Proposal for the Oakland Coliseum Site	105
Figure 5.64 Sea Level Scenarios	106
Figure 5.65 The Oakland Sacred	107
Figure 5.66 The Oakland Sacred: Master Plan	108
Figure 5.67 The Oakland Sacred: The 4th Ring	109
Figure 5.68 The Oakland Sacred: The 4th Ring	110
Figure 5.69 The Oakland Sacred: Community Spaces.....	113
Figure 5.70 Community Space: EARTH.....	114
Figure 5.71 Community Space: AIR.....	115
Figure 5.72 Community Space: FIRE.....	116
Figure 5.73 Community Space: WATER.....	117
Figure 5.74 Community Space: TREE OF LIFE	118
Figure 5.75 Plot Design Example 1	120
Figure 5.76 Plot Design Example 2.....	121
Figure 5.77 Plot Design Example 3.....	122
Figure 5.78 Plot Design Example 4.....	123
Figure 5.79 Plot Design Example 5.....	124
Figure 5.80 Plot Design Example 6.....	125
Figure 5.81 Plot Design Example 7.....	126

LIST OF TABLES

Table 4.1 Tally Results for Activities/Behaviors	77
Table 4.2 Tally Results for Objects Left at Grave	78
Table 4.3 Top Activities/Behaviors Observed	79
Table 4.4 Objects Most Left at Grave.....	80

CHAPTER 1: INTRODUCTION

The history of cemetery design literature reveals that cemetery form came about by the need “to solve an urban land use problem” (History, n.d.). As the space in cities began to be limited due to the number of people migrating in, so did the space in churchyard burial grounds due to the poor conditions that caused a rise in death rates (Herron, 2012). The cemetery emerges as the main solution to these issues (Curl, 1993). These landscapes are now a main option for us to bury our deceased loved ones in. They also provide a venue for the loved ones of those buried in these spaces to come and visit.

Communities are rapidly diversifying and hence, the user population of cemeteries is changing. Although this is the case, most of the cemeteries here in the United States remain Eurocentric in design and do not account for the different cultural expressions of grief and mourning that users exhibit as they visit their deceased loved ones (Jones, 2011). This presents an opportunity for landscape architects to utilize their skills and knowledge to address the changing needs of cemetery users, both for the living and the dead.

Chapter One gives an overview of the study by providing a background that leads into the definition of the problem statement and purpose of the study. It will then state the research questions, definitions of some key terms in the study, the significance of answering these questions, and then lastly, the delimitations of the study.

1.1 Background

“Form follows culture, but once developed, form often follows form” (Rogers, 2001, p. 24). This is sometimes seen throughout the history of landscape architecture and as this lens is utilized in the study of cemetery design, this concept is reinforced. The history of burial grounds shows the changing relationships Americans had with death. As these cultural paradigm shifts presented themselves, the cemetery transformed as well.

“Culture is always both a cause and effect” of one’s context and circumstances (Rogers, 2001, p. 20). As cemetery typologies were established as a physical manifestation of the culture of that time and place, the prevalent cemetery form began to influence culture itself and its evolution. The response of designers would be creating new typologies based on one’s personal philosophies on aesthetic value and cemetery management. The overall shared culture of the nation would inform the designer’s philosophies, especially when it came to the commercialization of cemetery management, but the final form and appearance of the cemetery would mainly come down to the designer’s or the cemetery operators’ own preferences.

“The built environment is the product of human decisions” and some of these decisions have the tendency to either include or exclude certain people (Armborst, D’Oca, Theodore, & Gold, 2017, p. 16). Apparently, this is evident in the evolution of the cemetery throughout the past two to three centuries.

Although many appreciated the environment that Mount Auburn provided, rural cemeteries were still inequitable due to the high price of plots that made it inaccessible for the less wealthy to have ownership in it (Jackson & Vergara, 1989). As much as the founders tried to make the rural cemetery the ideal place for burials for the whole

community, it still only met the needs of a privileged few in a rapidly diversifying urban community (Sloane, 1991).

As Strauch introduced the lawn-park cemetery to the nation, family control over graves diminished and practices of immigrants or their children could not be expressed in this new cemetery typology like they were able to do in the rural cemetery. Aesthetics was the main priority in the lawn-park cemetery as opposed to the individuality and grieving behaviors of lot-holders dictating the landscape design. The emotional impact of the cemetery disappeared (Sloane, 1991).

The memorial park took the concept of the lawn-park cemetery even further. It was designed to eliminate differentiation. Social distinctions were no longer an issue as monuments were restricted from being placed. In doing so, each section of the cemetery became a communal space that represented all the graves. The standard memorial marker prevented ostentatious displays of wealth and prestige through varying monument designs. The memorial park was successful at removing social distinctions, however, it completely failed in racial integration. The memorial park was a private, commercial enterprise and they catered to the white, Christian family that was perceived to be the builders of America's booming economy. This professionalization of the cemetery meant that the landscape had to cater to their target market. In doing so, policies had to be enforced such as the one at Forest Lawn that stated, "no interment of any body or the ashes of any body other than that of a human body of the Caucasian race shall be permitted" (Sloane, 1991, p. 187). As inclusive as the memorial park strived to be, one's race or lack of funds would still be a hindrance to the purchasing of a lot.

The professionalization of the institution transformed the appearance of the cemetery and its management. In the twentieth century, the memorial park emerged, and lot-holders were no longer interested in being involved in cemetery operation like in the nineteenth century. The death and burial process was the responsibility of professionals with families being interested only in the embellishment of their own family graves. “Mourning had become a personal, private custom” (Sloane, 1991, p. 197).

1.2 Problem Statement

Cemetery design may be dictated by the designer or cemetery operator, reflecting their own personal preferences or the national culture in general, but within this landscape, subcultures can still be expressed and preserved. Since there is an individual responsibility to maintain the lots of our loved ones, various forms of personal expressions can be found exhibited at gravesites. Cemeteries are designed and managed based on Euro-American concepts but in perpetuating this, the opportunity to preserve and protect cultural meaning is missed (Jones, 2011).

This can be observed in existing cemeteries, such as those in the San Francisco Bay Area. The way cemeteries are currently laid out limits the behaviors, activities, cultural practices, rituals, traditions, and personal expressions of the communities they serve. Current cemetery design benefits the corporation more than its users as it prioritizes profit maximization, ease of maintenance, and aesthetics over cultural value. With the history of cemeteries revealing inaccessibility due to racism and unaffordable prices, landscape architects have the opportunity to change that by designing cemeteries

that enhance and celebrate the personal expressions of these racially and ethnically diversifying communities around these cemeteries.

1.3 Purpose of Research

The purpose of this master's design thesis is to determine the design features and elements necessary for a cemetery that is transformed by the personal expressions exhibited by visitors after the day of burial. The study focuses specifically on the San Francisco Bay Area. The findings were used to develop a new kind of cemetery typology.

1.4 Research Questions

The following research questions will guide the investigation on designing cemeteries for personal expressions:

1. What are the conflicts that arise between how cemetery plots are designed and how people use them after the day of burial?
2. What programming elements and design features can encourage the various personal expressions exhibited by cemetery visitors after the day of burial?
3. How does a well-designed cemetery that encourages freedom of personal expression after the day of burial look like?

1.5 Definition of Key Terms

Terms found throughout this paper are defined in the following paragraphs in alphabetical order:

Cemetery is defined as a physical site or an area that provides space for containing the remains of the deceased. It may contain graves, tombs, or funeral urns. These graves may be housed in various structures such as a columbarium or a mausoleum aside from the traditional, in-ground burial. A cemetery is a separate location from a churchyard where traditionally, the deceased were buried. Originating from Greek and Latin roots in the 1300s, the word “cemetery” refers to a room for sleeping (Dictionary.com, 2021).

Culture is what distinguishes one group from another in terms of behaviors, values, beliefs, and attitudes. When a group of people have a shared culture, they think and act in similar ways (Parker & McDonough, 1999).

Cultural Expression is defined as “those expressions that result from the creativity of individuals, groups and societies, and that have cultural content.” **Cultural Content** “refers to the symbolic meaning, artistic dimension and cultural values that originate from or express cultural identities (UNESCO, n.d.)” In this paper, “Cultural Expression” will be used interchangeably with “Personal Expression” and vice versa.

Diversity is defined as “an intentional state of mixed people, institutions, and cultural norms” (The Just City Lab, 2018). ASLA sees diversity as a celebration of differences when it comes to “gender, race, sexual orientation, identity, culture, or ethnicity” (American Society of Landscape Architects, 2021). When diversity is mentioned in this paper, researcher refers to racial and ethnic diversity unless indicated otherwise.

Expression is defined as 1: “an act, process, or instance of representing in a medium. It is something that manifests, embodies, or symbolizes something else.” 2: “It is an act or product of pressing out (Merriam-Webster, n.d.).”

Inclusion is defined as “the acceptance of difference and the intention to involve diverse opinions, attitudes, and behaviors” (The Just City Lab, 2018). The American Society of Landscape Architects (ASLA) defines **inclusion** as “for all people” (American Society of Landscape Architects, 2021).

Personal is defined as 1: “of relating to or affecting a particular person” and 2: “done in person without the intervention of another. It is carried on between individuals directly (Merriam-Webster, n.d.).”

Personal Expression, also known as self expression, is “expressing one’s thoughts and feelings. These expressions can be accomplished through words, choices, or actions (Kim & Ko, 2007).” In this paper, “Personal Expression” will be used interchangeably with “Cultural Expression” and vice versa. Although, the word “personal” can often refer to something individual, in this paper, a personal expression can include the choice to be with people in a gathering or a group setting.

1.6 Research Methods

This study utilizes qualitative research methods (Sommer & Sommer, 2002) to explore the topic of cemetery design that encourages personal expression. The researcher began the investigation with a review of related literature to learn what is known about the topic at hand (Sommer & Sommer, 2002, p. 31). Previous research was reviewed to see what issues may be addressed by this study and to gain insight on how

design can be utilized to improve cemetery design. Data collection began with initial site visits to cemeteries that included notes derived from photo documentation and casual observation (Sommer & Sommer, 2002). Sites were selected for case studies from these initial site visits. Once these case study sites had been selected, a more in-depth documentation of observations was executed. Data gathered from the casual observation in the initial cemetery site visits were categorized and listed down. These prearranged categories were applied consistently to the case studies in the form of systematic observation using tally sheets and ethnograms/observation sheets (Sommer & Sommer, 2002, pp. 50-51).

The data gathered through these various methods were analyzed and synthesized from the case study pattern used by Marcus and Francis in their book, *People Places* (Marcus & Francis, 1998). This revealed insights on the successful and unsuccessful features in cemetery design as it relates to personal expressions, giving the researcher the benefit of developing the final cemetery design (Simonds & Starke, 2006, pp. 99-100).

1.7 Significance and Limitations

Significance

Findings in this study reveal programming elements and design features for cemeteries that encourage and promote personal expressions after the day of burial. This information can guide landscape architects and cemetery professionals in designing new cemeteries with the user in mind. Grief counselors typically use a photograph or an empty chair as substitutes for the dead but when someone embellishes a grave or performs

certain activities or grieving rituals at the cemetery, it becomes an act of potentially relinquishing the deceased to the perpetual care of the landscape (Wilson Baptist, 2013). Although studies of grief do not provide definitive conclusions, these rituals, activities, or practices of visitors at the cemetery have the potential of ameliorating the pain of death.

In addition to the strengthened freedom of expression that this study aims to provide for cemetery visitors, another benefit would be the preservation of culture. Euro-American design concepts of perpetual maintenance prevail in cemetery design. This focus can often neglect environmental sustainability, as well as cultural value. Mount Auburn Cemetery in Baltimore, Maryland is an example of a cemetery that celebrates ritual and ceremony of the African American community in the area. The display of the unique forms of cultural expression and meaning is preserved by allowing “memory, nature and ritual to shape the land” (Jones, 2011, p. 239). This study aims to discover how to allow cultural expression to shape cemetery form, thus sustaining the culture, history, religious and social customs of a community around a cemetery (Jones, 2011).

Limitations

The researcher understands that the cemeteries visited and observed are comprised of people, buried or visiting, who are predominantly of the Christian faith. This can limit the observations made as the graves of people of other faiths or religions, such as Judaism or Islam, may not have been observed in this study.

Limitations are acknowledged to be present as well in the various research methods employed in this study. These limitations can be found in Chapter 3 as it discusses the methodology.

1.8 Delimitations

Location

For the purposes of this study, the researcher chose to gather data within the state of California. In calculations performed by U.S. News to see which cities were the most diverse in the country, 7 cities in California were found to be in the top 10. This was out of the 66 U.S. cities with a population of 300,000 or more. These calculations were made using a diversity index that USA Today developed (US News, 2020). California is a suitable location to investigate personal expressions in cemeteries because of its diverse population.

Cemetery Burial Form

For the purposes of this study, the researcher has chosen to delimit observations to in-ground burials and the personal expressions that occur when a cemetery visitor comes to visit after the day of burial. This cemetery burial form provides a more interesting array of personal expressions to derive data from.

1.9 Summary

The purpose of this master's design thesis is to determine the design features and elements necessary for a cemetery that is transformed by the personal expressions exhibited by visitors after the day of burial. The study focuses specifically on the San Francisco Bay Area. The findings were used to develop a new kind of cemetery typology.

Chapter One gives an overview of the cemetery issue when it comes to personal expressions. The benefits of discovering design solutions for this issue have been described in this chapter.

Chapter Two focuses on a review of related literature when it comes to cemetery design and other relative concepts. This will give a more in-depth background and a stronger foundation for the investigation. Chapter Three discusses the methodology applied in this study. It goes over the research design and the methods employed to gather data and analyze them. Chapter Four interprets the data gathered and then synthesizes the successful and unsuccessful features observed at cemeteries. Chapter Five discusses the design process and presents the final concepts and design for a cemetery typology that is transformed by personal expression. Chapter Six revisits the research questions proposed here, discusses the relevance to landscape architecture, and recommends topics for future research.

CHAPTER 2: LITERATURE REVIEW

The purpose of this master's design thesis is to determine the design features and elements necessary for a cemetery that is transformed by the personal expressions exhibited by visitors after the day of burial in order to develop a new kind of cemetery typology.

Literature review chapter describes the history of cemetery typology from a Christian context given that the churchyard preceded cemeteries. It explains how the cemetery emerged as a landscape form and how it has evolved to its form today. Along with this evolution was the changing relationships Americans had with death as it shifted from a direct relationship to a distant one. Chapter Two explains how this took place and how that changing relationship has transformed the cemetery. The chapter then goes into this case study on how the personal expressions in an African-American cemetery were the main influence on the landscape form in that site. Lastly, the chapter shows examples from some tragic events that occurred in 2020 and how forms of personal and creative expression served as a means for healing for the collective grief of people and for the individual as well.

2.1 The Evolution of Cemetery Typology

2.1.1 The Cemetery Emerges

Prior to the Agrarian and Industrial Revolutions, the need for cemeteries was practically non-existent since churchyards served as the burial places for the deceased as they were buried beneath or around the church's grounds. Towns then industrialized

rapidly causing an influx of people who were migrating from the rural areas into the city (Curl, 1993). With the significant increase in population in these industrializing towns came urban issues related to health and hygiene such as sanitation, potable water supply, and solid waste management. The environment was not conducive for a thriving population. Life expectancy for an industrial worker was only seventeen years while that of a professional worker being only thirty years. Consequently, these conditions resulted in an increasing number of deaths and the need to find burial space became more urgent. Churchyards began to reach beyond their capacity for burials and this caused health and hygiene issues that further contributed to the harsh urban conditions (Herron, 2012). “It became clear that a radical approach to the burial of the dead would have to be devised” (Curl, 1993, p. 206). The cemetery emerges (Curl, 1993).

The first models for cemeteries emerged in places such as Scotland, Ulster, India, Louisiana, and France. These cemeteries were hygienic models where the deceased could be buried a distance away from the densifying populations in the city centers. These sites maximized what the natural environment provided through picturesque views. They became the preferred place for recreation in the neighborhoods they were in (Curl, 1993). These examples became influential in how burial sites would be formed in England and the United States as they addressed urban issues that these same cities were experiencing as it pertained to sanitation and rising population rates (Herron, 2012).

2.1.2 The Rural Cemetery

In 1831, Mount Auburn Cemetery becomes the first rural cemetery in the United States. Found just outside of Boston, in Cambridge, Massachusetts, the cemetery

provides an inviting natural setting for families to commemorate their loved ones amidst the pieces of artwork, such as monuments, scattered throughout the landscape to memorialize the dead (History, n.d.). The acceptance by the public was quite successful. Nine rural cemeteries throughout the country used Mount Auburn as its prime example for designing this landscape form. These new rural cemeteries were located and placed on the outskirts of industrializing towns to escape the commercial environment that urbanization produced (Sloane, 1991).

The rural cemetery provided a picturesque atmosphere that people desired during the mid-nineteenth century. Pathways were wide and serpentine roadways were visually pleasing as they followed the contours of the land. It was a horticultural splendor as each lot holder had the freedom to plant various species of trees and plants on their plots to honor their deceased loved ones. These rural cemeteries reflected the culture of “reestablishing some of the virtues of country life in the cities” (Sloane, 1991, p. 94). People enjoyed visiting these burial grounds and treated these sites as recreational parks where they could stroll around with their families and have picnics. It provided a place not just for the dead, but for the living as well (Herron, 2012).

2.1.3 The Lawn-Park Cemetery

New cemetery designers saw the success of the first generation of rural cemeteries, but they were disturbed by the inefficiencies in the layout and maintenance of the landscape. There was overcrowding of people, as well as a lack of unity in the plethora of monuments and plant material found throughout the rural cemetery. The

circulation design of roadways and pathways made it difficult for people to navigate throughout the park (Sloane, 1991).

The lawn-park cemetery emerges in the 1850s as a response to the design issues found in the rural cemetery. Efficiency in design was achieved by creating standards in monument production and planting design. Their placement within the landscape was no longer fully dictated by lot holders but by new cemetery owners and managers (Sloane, 1991).

2.1.4 The Memorial Park

In 1917, nearly one hundred years later after the movement of rural cemeteries around the United States, the *Memorial Park* then emerges with Dr. Hubert Eaton's model at Forest Lawn Cemetery in Glendale, California (Jackson & Vergara, 1989). In this model, Eaton took the concept of the lawn-park cemetery even further and proposed the lawn to become the most essential feature of the cemetery with flush monument tablets as opposed to the traditional, vertical monuments and memorials (Jackson & Vergara, 1989). This model only gained popularity at the conclusion of World War Two. The culture changed and so did the interest and importance given to cemeteries and monuments as it was much less (Jackson & Vergara, 1989). The memorial park model eventually becomes the most popularly developed model for the new cemeteries that we see today in the United States (Herron, 2012).

2.2 Changing Relationships with Death in the United States

The changes throughout the history of cemeteries reveal the cultural shifts that took place when it came to the relationship that Americans had with death. Early America saw the heavy involvement of the family in the processes necessary for a proper burial such as cleaning the body, digging the grave, building the coffin, and even carving the gravestone at times. Death was deeply personal to those mourning and grieving (Sloane, 1991).

Upon the establishment of rural cemeteries, private, secular associations became the owners and managers of the graveyard. These associations had their focus on further developing the cemetery landscape. Families became members for the purpose of preserving and protecting their own plots within the cemetery. The direct involvement of Americans in the death process began to diminish, although more quickly in the urbanizing towns than in the rural areas. City people appreciated the escape from the commercialism and industrialization of urban life. The rural cemetery created a physical isolation of the dead from the living, however, the naturalistic landscape and picturesque atmosphere that it provided through its hills and valleys made that distancing publicly acceptable (Sloane, 1991).

This public acceptance of the cemetery's isolation from its lot-holders exposed the cultural shift and evolving attitudes toward death. Society secularized and the idea of the afterlife became bleak, increasing people's fear of death. In avoidance of these realities, families distanced themselves further by allowing professionals to manage the tasks they would personally execute in the past. When someone was dying, people relied on nurses and doctors to provide the care. Upon death, people relied on morticians to handle the

body. Once buried, it was the cemetery superintendents that maintained and beautified the grave. The death and burial process gradually professionalized. Entrepreneurs entered the scene and saw the cemetery as an opportunity for business, as well as community service (Sloane, 1991).

This professionalization of death gave rise to the lawn-park cemetery where the responsibility of maintaining the grave and designing monuments was in the hands of the cemetery superintendent. Their goal in taking this responsibility was achieving a simplicity in design aesthetic combined with the practicality of easy maintenance. The cemetery landscape transformed from a naturalistic, picturesque style to a pastoral one with its vast lawns. Monuments looked almost uniform by prescription. The professionalization of death and burial altered the appearance of the cemetery but also its character. Entrepreneurs had stimulated the American economy significantly and that commercial culture crept into the landscape of burial grounds (Sloane, 1991).

America had seen sales and advertising strategies in the real estate and insurance industries that could well be applied to the cemetery. Dr. Hubert Eaton saw the opportunity and the culture of “open commercialism” (Sloane, 1991, p. 160) gave way to a new cemetery typology, the memorial park. In 1917, Eaton established Forest Lawn Memorial Park in Glendale, California, a suburb in the county of Los Angeles. It was the first of its kind. With several people migrating in from various parts of the country, Los Angeles was an appropriate location to experiment with cemetery form. Cemetery operators were fascinated by the vast lawns found in the urban parks emerging in cities, but they were not pleased with the contemporary monument styles found in the lawn-park cemetery. This informed the design of the memorial park. The pastoral landscape of the lawn-park

cemetery was maintained in the new cemetery typology. Monuments on plots or in sections of plots were eliminated. They were replaced with simple, bronze memorial markers that were flush to the ground, making it more of a private reminder for the family rather than a public statement. The appearance of the cemetery changed but what truly differentiated it from other cemeteries was its business model. The memorial park provided all the services needed in the death and burial process. It was the culmination of the culture where Americans completely distanced themselves from the cemetery and left all the responsibility to the institution (Sloane, 1991).

2.3 The Cemetery as a Place of Cultural Identity

In a case study of Mount Auburn Cemetery in Baltimore, Maryland, Jones contrasts this African American cemetery with Euro-American cemeteries. The rural cemetery, which was Euro-American in nature, was designed to be park-like, romantic, and formal with its planting design, grand monuments, mowed lawns, and tidy rows of graves. It was often a denial of the reality that the cemetery was a place for the dead (Jones, 2011, pp. 234-235).

Baltimore's Mount Auburn Cemetery, although originally designed as a traditional rural cemetery, was built and owned by the United Methodist Church comprised of African Americans (Sharp Street Memorial United Methodist Church n.d.). This meant that the use or actions of those to whom the cemetery belonged would transform the place and shape the land based on the cultural imprint or overlay that they left behind (Jones, 2011, p. 227). These owners were responsible for the care and maintenance of their individual gravesites. Hence, upon observation, many forms of cultural expressions can be seen

throughout the cemetery landscape. Jones describes the Holsey Plot, located in the northeastern part of the site, showing an example of how these cultural expressions occur. The Holsey Plot includes a monument shrouded with a fabric rich in color and pattern. The tree behind the monument is utilized as well by the visitor(s) as ribbons, plastic flowers, and water jugs hang from it. There is a diversity and a freedom of expression encouraged by the informal atmosphere provided by the malleable cemetery form. The lack of restrictions prevented the deprivation of visitors from executing traditions founded upon one's history (Jones, 2011, p. 236).

Culture, stemming from a rich African American history through the lens of slavery and landscape, is expressed within the cemetery. The naturalistic design and random form reflect the relationship that African Americans had with the land since traditionally, slave burial grounds were not just family plots, but they were also community gathering spaces (Sloane, 1991, p. 15). Culture informs the design and appearance of Baltimore's Mount Auburn Cemetery as historical, religious, and social customs of African Americans are represented within the site. The cemetery, Baltimore's Mount Auburn Cemetery along with other African American cemeteries, is preserving community. However, when this cemetery is juxtaposed against Euro-American cemeteries with their geometric order and perpetual care, some start to see the condition of Baltimore's Mount Auburn Cemetery as a sign of neglect and chaos. This view disregards the value to culture, and to environment which Jones explains in the article as well, that places like this hold. Euro-American cemeteries prioritize form and perpetual maintenance practices, but it comes at the cost of ritual, ceremony, cultural expression, and its preservation (Jones, 2011).

Jones sees the African American cemetery and how its inherent improvisational aesthetic coming from its cultural overlay can transform this landscape of the dead. Aside from the environmental benefits it provides, Mount Auburn Cemetery becomes a place of cultural identity. It allows for the preservation of cultural meaning by letting memory, nature, and ritual shape this landscape. It becomes a place not solely used for mere mental remembrance but also for preservation of and participation in cultural expressions rooted in one's history, background, and traditions. The challenge now lies in discovering how to move forward in terms of cemetery design with cultural preservation and maintenance as important considerations (Jones, 2011, pp. 238-239).

2.4. Personal Expression as a Means for Healing

In 2020, the collective grief that resulted from recent traumatic events spurred a flourishing of personal and creative expression. This often occurred through the use of image- and object-based media. Following the unexpected death of Kobe Bryant, one of the most beloved players of the Los Angeles Lakers, murals and shrines began to appear throughout Los Angeles and around Southern California. On the side of a store off of Melrose Avenue, fans created a makeshift shrine where they could gather and place candles and purple and gold flowers (the team colors of the LA Lakers) under a mural depicting the basketball player's likeness. Visitors also wrote notes of grief and mourning on yellow sticky notes and placed them upon the purple wall in order to commemorate Bryant's legacy (Burch & Habeshian, 2020).

A few months later, during the aftermath of the murder of George Floyd and the resurgence of the Black Lives Matter movement, murals and portraits of Floyd and other

police brutality victims began to appear in Minnesota and across the nation. The newly created images of these victims were often “spontaneous” acts that were meant to call for justice and celebrate community. The sites where these murals live have not only functioned as memorials for the deceased but also as ad hoc gathering locations for vigils and ceremonies for those who survive him (Stoilas, 2021).

Altogether, this reflects the current research surrounding grief, healing, and personal expression. Psychologists Robert Neimeyer and Barbara Thompson in their joint discussion of grief therapy note that grief and anguish have existed as long as humanity itself. Those who have lost loved ones have often found solace in art, rituals, music, and spiritual traditions, among other forms of expression. Their work specifically suggests that a wide range of creative procedures or means of expression can help people find meaning and direction during an emotional and turbulent experience (Neimeyer & Thompson, 2014).

Scholars from other disciplines form similar conclusions. In his study of the relationship between landscapes and grief, geographer Hywel Griffiths acknowledges that physical, virtual, and embodied-psychological spaces are all interdependent. Shared experiences of bereavement and grief are overlain by one’s own personal experiences. In other words, Griffiths’ partly argues that although geographies of grief, memory, commemoration, and absence tend to be shared amongst groups, it is the experience of the individual that provides it with dynamism and affect (Griffiths, 2021).

2.5 Summary

This chapter shed light on how throughout cemetery history, form changed based on the decisions of a few people in authority. Most of these decisions were founded on personal preferences as it related to design aesthetic and eventually to economic factors as the cemetery commercialized. The distanced relationship with death has left users of the cemetery less involved in cemetery design, with concern mainly on the cemetery plot of their loved ones. This is seen through the embellishment and decoration of the cemetery plots by visitors. In this paper, this is considered as personal expressions.

Mount Auburn Cemetery in Baltimore, Maryland, provides an example of a cemetery that is transformed by personal expressions. Less focus is given to the design aesthetic or the economic benefits of the cemetery, but the priority is given to cultural, and even ecological value.

The significance of creating a cemetery that encourages and promotes personal expression was illustrated as well as research showed how solace can be found in various forms of expression as seen in the responses to the events of 2020.

This research aims to produce a cemetery typology design that takes the personal expressions found at the cemetery plot to the scale of an entire cemetery site. It proposes a cemetery that is transformed by people rather than by prescribed Euro-American design or by profit maximization. In Chapter Three, the methodology in gathering data to inform this design goal is laid out.

CHAPTER 3: METHODOLOGY

The purpose of this master's design thesis is to determine the design features and elements necessary for a cemetery that is transformed by the personal expressions exhibited by visitors after the day of burial. The study focuses specifically on the San Francisco Bay Area. The findings were used to develop a new kind of cemetery typology.

Chapter Three presents the qualitative methodology (Sommer & Sommer, 2002) and research process that have been employed to answer the research questions presented in Chapter One. These methods have been chosen to reveal the successful and unsuccessful features of cemetery design through the lens of human behavior.

This chapter discusses the research design. It covers the study population, study location, the data collection methods used in each phase of the research process, possible bias and error in the methodology, and how data was analyzed. The design process is explained in this chapter as well.

3.1 Research Design

The researcher began the investigation with a review of related literature. This was conducted to learn what is known about the topic at hand (Sommer & Sommer, 2002, p. 31). Previous research was reviewed to see what issues may be addressed by this study and to gain insight on how design can be utilized to improve cemetery design.

The investigation involved qualitative research methods (Sommer & Sommer, 2002) conducted throughout three data collection phases. In Phase 1, the researcher conducted casual observation at initial cemetery site visits. The number of cemeteries

visited was determined to be sufficient for the study once the observations became repetitive. To explain further, if researcher had visited an additional site, similar observations would have been expected. In Phase 2, a criteria matrix, based on insights derived from the observations in Phase 1, was developed to select 3 case study sites. Phase 3 employed systematic observation at these selected case study sites. Notes were documented using tally sheets and ethnograms/observation sheets that included categories developed from Phase 1.

All the data gathered from these phases were then analyzed and synthesized using the case study method that Marcus and Francis used in their book, *People Places* (Sommer & Sommer, 2002) to determine the successful and unsuccessful features in cemeteries as they relate to personal expressions. The information helped drive the researcher in beginning the design process. The final output is the design of a new cemetery typology at a selected site that encourages and promotes personal expressions of visitors.

The researcher had initially planned to conduct interviews with cemetery professionals and visitors to gain insights on the research questions. For this, the researcher went through the Institutional Review Board's (IRB) approval process and was approved. These documents are found in the Appendix. Unfortunately, the researcher was unsuccessful in gaining approval from the cemetery managers for interviews. Hence, the interviews were omitted from the research design as a method of investigation. Figure 3.1 visually represents the final research design created for this study. The next few sections explain this research design in more detail.

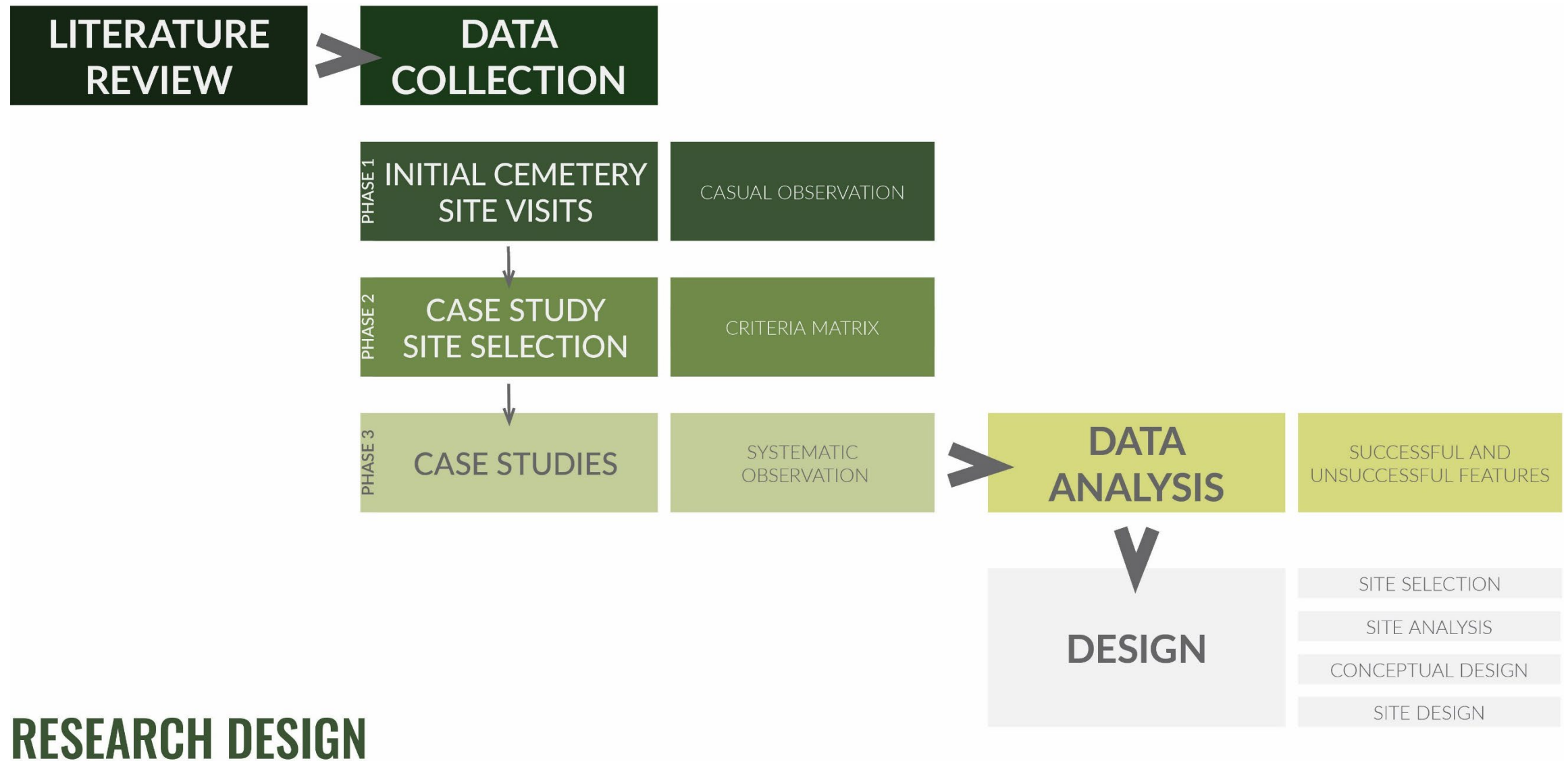


Figure 3.1 Research Design

3.2 Study Population and Location

The study population for this research was the people present in the cemetery sites during those times of observation. This included people of different sexes, races, and ages engaging in various activities and behaviors at the cemetery.

The researcher chose to delimit the study location to cemeteries within the San Francisco Bay Area in California. California is the most ethnically and racially diverse state in the United States. The Bay Area cities of San Jose, Oakland, and San Francisco happen to all be in the Top 20 most racially and ethnically diverse cities in the United States (US News, 2020) making this region an excellent location to pursue this research.

3.3 Data Collection

The data collection process includes three phases:

3.3.1 Phase 1: Initial Cemetery Site Visits

To begin data collection, the researcher visited cemetery sites throughout the San Francisco Bay Area in California to observe the activities of cemetery visitors and investigate the physical traces on cemetery graves. Without any prearranged categories or a scoring system, casual observation was performed (Sommer & Sommer, 2002, p. 48) using the following methods for documentation:

i. Photo Documentation

Photos were taken through researcher's personal iPhone to document the physical traces of cemetery visitors on graves and what objects they left behind for the buried. No individually identifiable data of the living were gathered during this

phase. Once all photos had been taken, they were then categorized into different groups based on what was observed and captured in those photos.

ii. Casual Observation

An ethnogram (Figure 3.2) was used to take note of observations on the type of people and the activities people engage in at the site. The ethnogram includes fields such as the number of people, age group, race, sex, and activities/behaviors. Observation was done unobtrusively from a distance and at times, from researcher's tinted car. Researcher ensured that the distance from subject/s was far enough to prevent overhearing and/or documenting any conversations as the focus was on observing broad behaviors such as talking, standing, sitting, eating, etc.

WOODLAWN MEMORIAL PARK

OPEN SPACE ETHNOGRAM

DATE: 5/31/2021
 TIME: 1:30PM-2:15PM
 WEATHER: Sunny 75°

	USERS	RACE	SEX	AGE GROUP	ACTIVITIES/BEHAVIORS
EX	ALONE IN GROUPS OF 2 <u>IN GROUPS OF 2 OR MORE</u> OTHER _____	<input checked="" type="checkbox"/> CAUCASIAN <input type="checkbox"/> AFRICAN AMERICAN <input checked="" type="checkbox"/> ASIAN <input type="checkbox"/> NATIVE HAWAIIAN/PACIFIC ISLANDER <input checked="" type="checkbox"/> LATINO <input type="checkbox"/> OTHER _____	<input checked="" type="checkbox"/> MALE <input checked="" type="checkbox"/> FEMALE	<input type="checkbox"/> 0-5 <input type="checkbox"/> 6-12 <input checked="" type="checkbox"/> 13-17 <input type="checkbox"/> 18-25 <input type="checkbox"/> 26-35 <input checked="" type="checkbox"/> 36-55 <input type="checkbox"/> 56-65 <input checked="" type="checkbox"/> ABOVE 65	<u>Sitting</u> <u>Eating</u> <u>Sweeping grave</u> <u>Taking pictures of flowers</u> _____ _____ _____
1	ALONE IN GROUPS OF 2 IN GROUPS OF 2 OR MORE OTHER _____	<input type="checkbox"/> CAUCASIAN <input type="checkbox"/> AFRICAN AMERICAN <input type="checkbox"/> ASIAN <input type="checkbox"/> NATIVE HAWAIIAN/PACIFIC ISLANDER <input type="checkbox"/> LATINO <input type="checkbox"/> OTHER _____	<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE	<input type="checkbox"/> 0-5 <input type="checkbox"/> 6-12 <input type="checkbox"/> 13-17 <input type="checkbox"/> 18-25 <input type="checkbox"/> 26-35 <input type="checkbox"/> 36-55 <input type="checkbox"/> 56-65 <input type="checkbox"/> ABOVE 65	_____ _____ _____ _____ _____ _____
2	ALONE IN GROUPS OF 2 IN GROUPS OF 2 OR MORE OTHER _____	<input type="checkbox"/> CAUCASIAN <input type="checkbox"/> AFRICAN AMERICAN <input type="checkbox"/> ASIAN <input type="checkbox"/> NATIVE HAWAIIAN/PACIFIC ISLANDER <input type="checkbox"/> LATINO <input type="checkbox"/> OTHER _____	<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE	<input type="checkbox"/> 0-5 <input type="checkbox"/> 6-12 <input type="checkbox"/> 13-17 <input type="checkbox"/> 18-25 <input type="checkbox"/> 26-35 <input type="checkbox"/> 36-55 <input type="checkbox"/> 56-65 <input type="checkbox"/> ABOVE 65	_____ _____ _____ _____ _____ _____

Figure 3.2 Observation Sheet/Ethnogram Template

3.3.2 Phase 2: Case Study Site Selection

After visiting several cemetery sites in Phase 1, a criteria matrix (Figure 3.3) was developed to determine which three sites would be ideal for conducting a systematic observation in. The researcher was then able to select case study sites (Marcus & Francis, 1998) to perform systematic observation in (Sommer & Sommer, 2002).

DATA COLLECTION		CEMETERY SITES	CRITERIA 1	CRITERIA 2	CRITERIA 3	TOTAL
PHASE 2	CASE STUDY SITE SELECTION	Cemetery 1	✓	✓	✓	3
	CRITERIA MATRIX	Cemetery 2		✓	✓	2
		Cemetery 3			✓	1
		Cemetery 4	✓			1
		Cemetery 5		✓	✓	2

Figure 3.3 Criteria Matrix for Case Study Site Selection

3.3.3 Phase 3: Case Studies

Once the three case study sites had been selected, the researcher then took a more in-depth investigation of these cemetery sites. Data gathered from the casual observation in the initial cemetery site visits in Phase 1 were categorized and listed down. These prearranged categories were applied consistently to these case studies in the form of systematic observation (Sommer & Sommer, 2002, pp. 50-51). Categories observed were tallied on a sheet (Figure 3.4) to give researcher insight as to what the top activities,

physical traces, objects, and types of people are found at these case study cemetery sites.

DATA COLLECTION

PHASE 3
CASE STUDIES

SYSTEMATIC OBSERVATION

TALLY SHEETS

Cemetery: _____

Date: _____

Time: _____

Users

- Alone
- In Groups of 2
- In Groups of 3 or More

Age Group

- 0-5
- 6-12
- 13-17
- 18-25
- 26-35
- 36-55
- 56-65
- Above 65

Race

- Caucasian
- African-American
- Asian
- Native Hawaiian/Pacific Islander
- Latino
- Other

Sex

- Male
- Female

Activities/Behaviors

- Activity/Behavior 1
- Activity/Behavior 2
- Activity/Behavior 3

Objects

- Object 1
- Object 2
- Object 3

Figure 3.4 Systematic Observation Tally Sheet

3.4 Data Analysis

Data and information gathered from the data collection methods employed in this study were analyzed by entering data in spreadsheets, reviewing observation notes, and reviewing photos taken. Data were visualized with the appropriate graphics such as graphs and tables. Analysis and findings were synthesized using the case study pattern used by Marcus and Francis in their book, *People Places*. This revealed the major uses and users, successful features, and unsuccessful features (Marcus & Francis, 1998) of these cemetery sites as it relates to personal expressions. These insights gave the

researcher the benefit of developing the final cemetery design (Simonds & Starke, 2006, pp. 99-100).

3.5 Bias and Error

The researcher acknowledges that the data collection methods employed in this research, such as photo documentation, casual observation, and systematic observation, are prone to bias and error as those times spent documenting observations at cemetery sites may not have covered every aspect of personal expressions at cemeteries. The observations are made at certain points in time where many factors can affect circumstances such as weather, holidays, frequency of visits, or time of day.

To prevent human bias and error, the researcher made observations on different days of the year and at different times of the day or the week to be able to see if there were big variations in the personal expressions taking place at these cemeteries or not.

3.6 Design Process

The final step in this research process is design. Design takes place in the following steps:

3.6.1 Site Selection

Site selection requires “investigation and documentation” of (1) the “evaluation of existing site resources including confirmation of micro and macro site characteristics” and (2) the “establishment of project goals and intent in terms of program components and specific design priorities (Dewberry, 2008, p. 23).” The program developed from analysis and findings were helpful in determining the type of site that would be appropriate to select

for a cemetery design. Other criteria were determined as well to achieve the outcomes desired.

3.6.2 Site Analysis

As the site had been selected, an analysis of that site had to then be conducted. This “provided the designer with a full understanding of the potential or allowable use” of the site (Dewberry, 2008, p. 24). The analysis explored several aspects of the site such as the physical, socio-cultural, environmental, and/or economic attributes of the site among others.

3.6.3 Conceptual Design

The designer obtained all the information required from the research and design process and was then able to describe plans for the site through “sketches, functional diagrams, or concept plans” that could show the “distribution of land use and major circulation requirements” within the site. This was during the phase of conceptual design. In this phase, the program was adapted to become site-specific (Dewberry, 2008, p. 185). This was the point wherein all research and analysis conducted could support the site design to develop “organically between the natural and the planned environment (Simonds & Starke, 2006, p. 112).”

3.6.4 Schematic Design

In the schematic design phase of the design process, the conceptual design was further developed and refined. Specific forms and layouts emerged. In this phase, there

was sufficient information to visually communicate the design to others and receive feedback before finalizing the design and moving on to developing construction documents. The schematic design was completed with realistic considerations and feasibility in mind (Dewberry, 2008, p. 221). This study does not go on to produce construction documents as the schematic design is its final output.

3.7 Summary

In this chapter, the research design to be applied to this study was presented. The study population and location were stated along with the delimitations as well. Various data collection methods are used in each phase along with the methods of analyzing the findings. In these methods, human bias and error can be present and it was explained how this is addressed. Additionally, Chapter Three explained the design process and how the synthesis of all these findings can aid in producing the final output of a schematic design. Chapter Four will discuss the analysis and findings derived from this methodology.

CHAPTER 4: ANALYSIS AND FINDINGS

The purpose of this master's design thesis is to determine the design features and elements necessary for a cemetery that is transformed by the personal expressions exhibited by visitors after the day of burial in order to develop a new kind of cemetery typology.

Chapter Three describes the research design and methods used to collect and gather data. In this chapter, Chapter Four, the analysis and findings derived through each phase of the methodology will be explained. Insights will then be expressed as everything is synthesized.

4.1 Phase 1: Initial Cemetery Site Visits

The researcher chose a randomized sample of various cemeteries to conduct casual observation in these initial cemetery site visits (Figure 4.1). These cemeteries are found in the San Francisco Bay Area of California. This section shows some of the photos documented at eight cemetery sites visited and some notes on what was observed. More focus is given here to physical traces and objects left at the grave. More discussion on the observations of people at the cemetery will be found further on in this chapter.

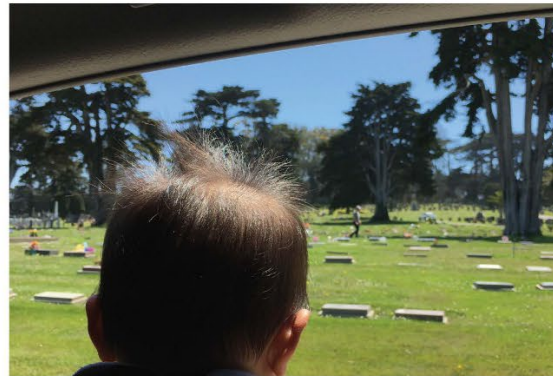
PHASE 1
INITIAL CEMETERY
SITE VISITS



CHINESE CEMETERY
Daly City, CA



ITALIAN CEMETERY
Colma, CA



WOODLAWN MEMORIAL PARK
Colma, CA



GREEK ORTHODOX MEMORIAL PARK
Colma, CA



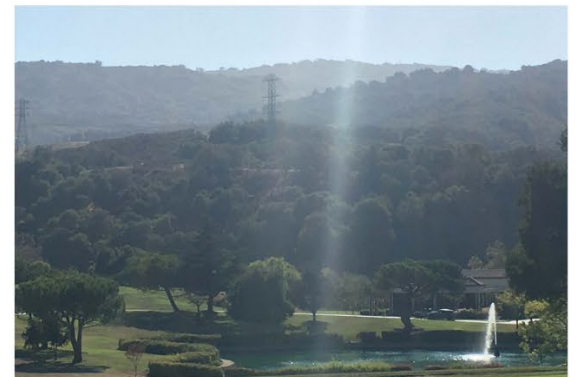
MOUNTAIN VIEW CEMETERY
Oakland, CA



OAK HILL MEMORIAL PARK
San Jose, CA



LOS GATOS MEMORIAL PARK
San Jose, CA



GATE OF HEAVEN CATHOLIC CEMETERY
Los Altos, CA

Figure 4.1 Phase 1: Initial Cemetery Site Visits

4.1.1 Chinese Cemetery

Address: 4650 Callan Blvd., Daly City, CA 94015

Date of Visit: May 31, 2021

Time of Visit: ~11:20am

Photos and Notes:



Figure 4.2 Chinese Cemetery

Figure 4.2 shows the Chinese ritual of lighting incense at the grave. Photo 1 shows a new burial with a temporary wooden marker. The incense is placed into the ground in this instance. The more established graves found in Photos 2, 4 and 5 have tombstones with holes in them specifically for placing the incense sticks. Photo 3 is a grave with a bigger plot and against the wall at the back of the plot is a rectangular container of soil, sand, or pebbles to stick the incense sticks in. This is an example of the cemetery plot being designed to accommodate ritual and culture.



Figure 4.3 Chinese Cemetery

Photo 3 in Figure 4.3 shows a sign prohibiting any kind of planting at the burial plot. It says, “NOTICE: Planting of any trees, shrubs, weeds, flowers, or any other vegetation in, around, or upon any portion of the burial plot is prohibited.” Although the cemetery prohibits this, some of the graves have plants that are established in the soil such as those seen in Photos 4 and 5. Photos 1 and 2 show some jade plants that have been placed in the tombstone holes made for holding flowers. Soil was placed within those holes for the jade plants to grow. This is interesting in the fact that the jade plant has a spiritual significance as it symbolizes a few positive things in Feng Shui such as good luck, wealth, prosperity, and friendship (Clark, n.d.). The cemetery prohibits these plantings, yet visitors are finding ways to still bring in those plantings somehow. This shows a conflict between cemetery policy and the personal expressions of visitors.



Figure 4.4 Chinese Cemetery

Figure 4.4 shows some of the practices in this cemetery during the Qing Ming festival. Literally translated, it means “grave sweeping day.” In Chinese culture, it is a traditional time of visiting deceased loved ones, usually falling around the first week of April based on the lunar calendar. Visitors burn incense and paper and leave an offering of flowers and a variety of drinks and cold foods (Larson & Vigil, 2006).

Photo 5 in Figure 4.4 shows a new grave with oranges on a plate placed on the ground. This is on a flatter area of the cemetery. Photo 2 has some fruits as well but because of the slope, the concrete platform allows the practice of this tradition to be possible. Otherwise, round fruits or other objects would just slide off of the grave.

Metal buckets were also found in some graves. This is where visitors burn paper. It is unknown to the researcher if this is brought in by the visitors or provided by the cemetery. Either way, to practice this tradition, the metal bucket must be present.

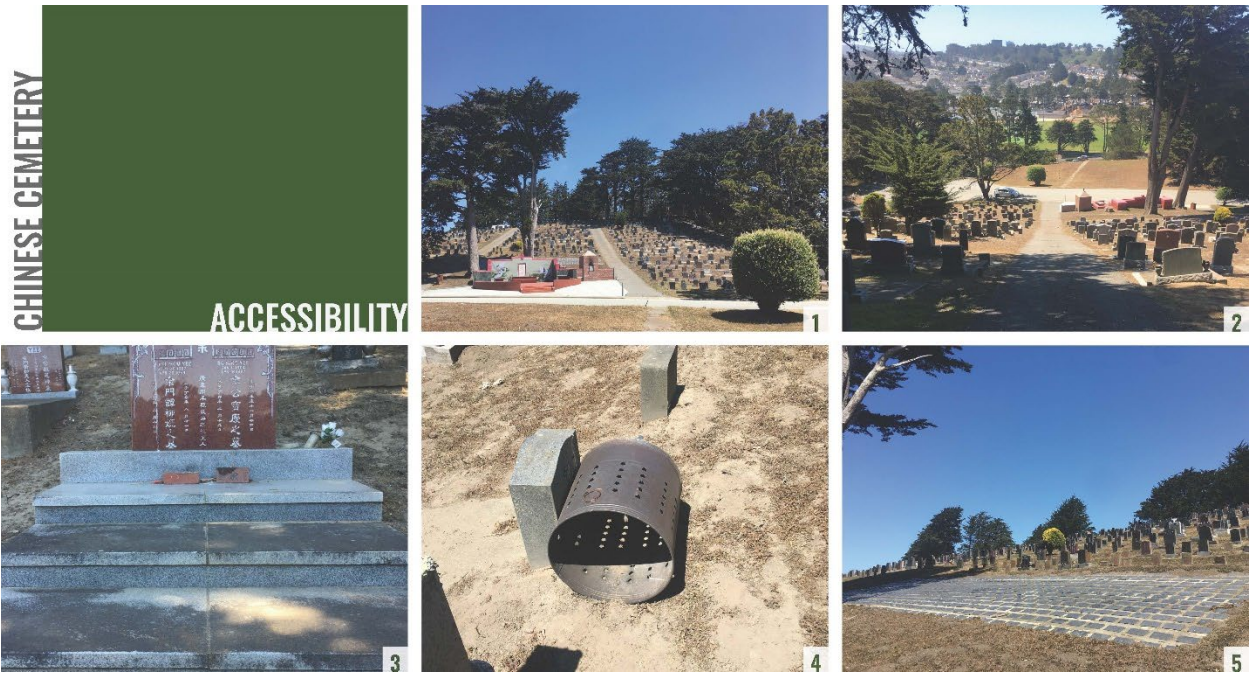


Figure 4.5 Chinese Cemetery



Figure 4.6 Chinese Cemetery

Figures 4.5 and 4.6 show how the physical attributes of the cemetery can affect accessibility and personal expressions. In this case, the cemetery has areas where there are steep slopes making it difficult for some types of visitors, such as the disabled or the elderly, to access the graves of their loved ones. The objects that visitors use or leave at the grave may even roll off the grave such as the metal bucket in Photo 4.

Some graves in this cemetery have been adapted to this topography to still accommodate some rituals and traditions. Photos 3, 7, 8, and 9 show concrete platforms for placing objects so that they do not just roll off.

In the case of Photo 6 in Figure 4.6, a whole space has been formally created with walls, hardscaping, and concrete tables for visitors to be able to perform the activities they desire and have places for the personal expressions that they leave behind.

The elements that allow for visitor activities and personal expressions are revealed in these photos but in Photo 5 of Figure 4.5, those elements are missing. The graves and markers are placed so closely together on a steep slope. In this area, there were hardly any personal expressions to be found except for a few flowers scattered around.

CHINESE CEMETERY

FLOWERS & DECORATION



Figure 4.7 Chinese Cemetery

Figure 4.7 shows some of the things that visitors leave behind as personal expressions. There are plastic flowers, fresh flowers, plastic animals, flags, and/or bottles of water. There are holes in some of the tombstones for placing flowers. This can be seen in Photos 1, 2, and 4. The tombstone in Photo 3 does not have those holes for flowers. In this case, the visitors left plastic flowers by pushing them into the soil in the ground for stabilization.

4.1.2 Italian Cemetery

Address: 540 F St., Colma, CA 94014

Date of Visit: May 31, 2021

Time of Visit: ~1:30pm

Photos and Notes:



Figure 4.8 Italian Cemetery

Photo 3 in Figure 4.8 shows a sign near the entrance that says the name of the cemetery, Italian Cemetery, and under that it states, “SERVING ALL FAITHS & NATIONALITIES SINCE 1899.” Although, it is a cemetery that is specific to a nation, it shows that it welcomes people of diverse cultures based on religion or nationality.



Figure 4.9 Italian Cemetery

Figures 4.9, 4.10, and 4.11 show several graves at the Italian Cemetery. Most of the graves there were placed above ground in these burial vaults. The monuments on these graves are forms of personal expression. It gives insight on the religious background of those buried and those related to the deceased. Many of the religious images observed in this cemetery seem to represent images and symbols of Roman Catholicism. The intricate stonework was impressive as these monuments had to be done with skill and precision. The sizes of these monuments were much larger than the tombstones observed in other cemeteries.

ITALIAN CEMETERY
MONUMENTS

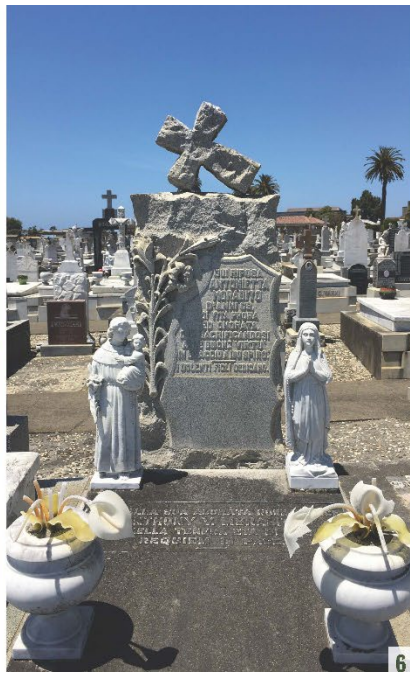


Figure 4.10 Italian Cemetery

ITALIAN CEMETERY
MONUMENTS

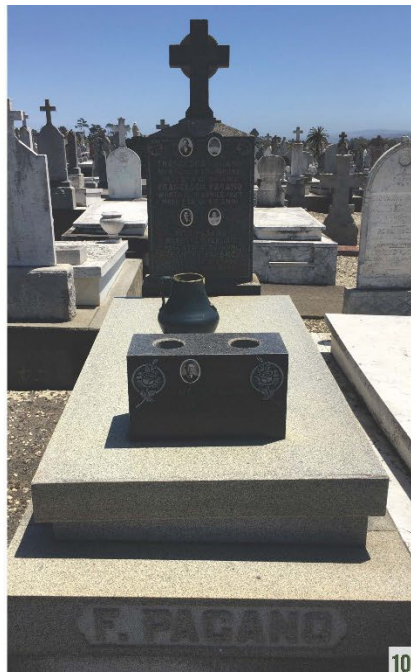
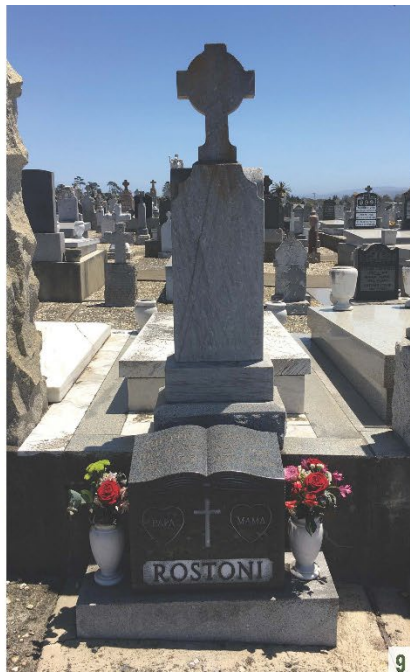
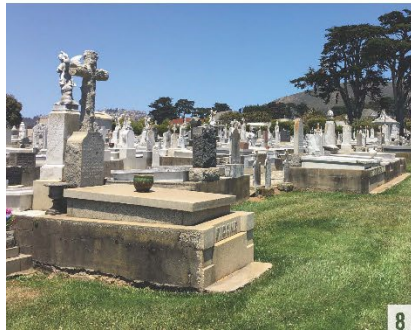


Figure 4.11 Italian Cemetery



Figure 4.12 Italian Cemetery

Figure 4.12 shows photos of some of the things that visitors leave behind such as potted plants, plastic flowers, plastic animals, and holiday decorations. The raised graves provide a platform for leaving these objects and making them more visible to visitors and passersby.

4.1.3 Woodlawn Memorial Park

Address: 1000 El Camino Real, Colma, CA 94014

Date of Visit: May 31, 2021

Time of Visit: ~2:10pm

Photos and Notes:



Figure 4.13 Woodlawn Memorial Park

Figures 4.13 and 4.14 show one grave that is heavily personalized. At first glance, the grave appears as if it is just a grave of flowers and balloons as seen in Photo 2. Upon closer inspection, there are many more things to discover and observe in this plot. There are religious symbols, holiday decorations, artwork, toys, lanterns, plastic flowers, fresh flowers, sports paraphernalia, cake, a can of beer, potted plants, mini-fences and interestingly, bottles of engine coolant. The visitors used their entire plot to place things that expressed their love for the deceased in this grave.

WOODLAWN MEMORIAL
PERSONALIZED GRAVE



Figure 4.14 Woodlawn Memorial Park

WOODLAWN MEMORIAL
FENCE DECORATION

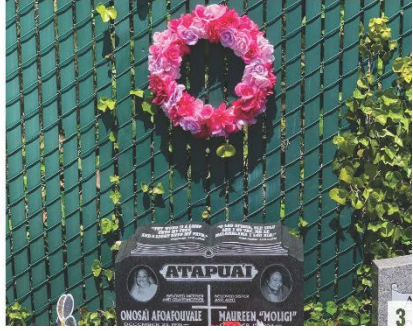
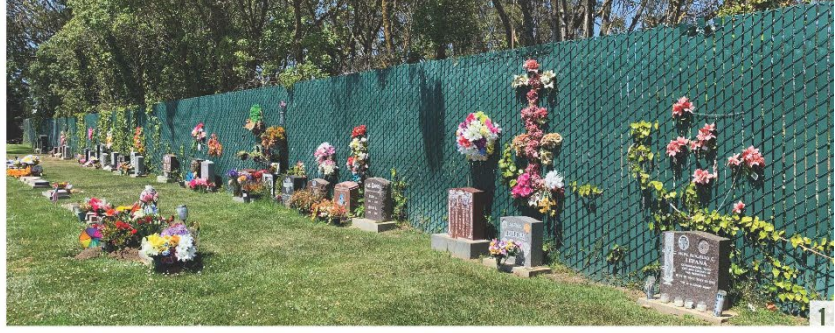


Figure 4.15 Woodlawn Memorial Park

The graves seen in Figures 4.15 and 4.16 are adjacent to a temporary fence that covers an area of the cemetery where maintenance work is staged. The fence is there to keep the mounds of soil invisible to cemetery visitors. The researcher noted that this area was the most colorful display of personal expressions among all the cemeteries observed in this study. The visitors did not own the fence as part of their cemetery plot. Nevertheless, it is obvious that it was utilized for personal expressions. Visitors hang wreaths, chimes, plastic flowers, decorations, messages, vines, and religious symbols. Some of these items, such as the wreaths and chimes, were rarely seen at all the other standard graves. The vertical element added a different dimension to the embellishment of the grave.



Figure 4.16 Woodlawn Memorial Park



Figure 4.17 Woodlawn Memorial Park

Figure 4.17 shows the use of flags at the graves of veterans during the Memorial Day holiday when this site was visited. Observations throughout the study showed the prevalent traces of holiday decorations throughout the year.

Figures 4.18-4.21 show some of the flat memorial markers popularized by the Forest Lawn Memorial Park in 1917. This is very minimal space for visitors and yet, personal expressions are seen in abundance on and around the markers. In Photo 1 of Figure 4.18, plastic flowers are poked into the ground to border the marker. In Photo 4 , a sign post is located near a memorial marker and is utilized to hang chimes. Just like the fence in Figures 4.15 and 4.16, when a vertical element is found near the grave, visitors will utilize it even if it is outside their plot.

WOODLAWN MEMORIAL
FLAT MEMORIALS

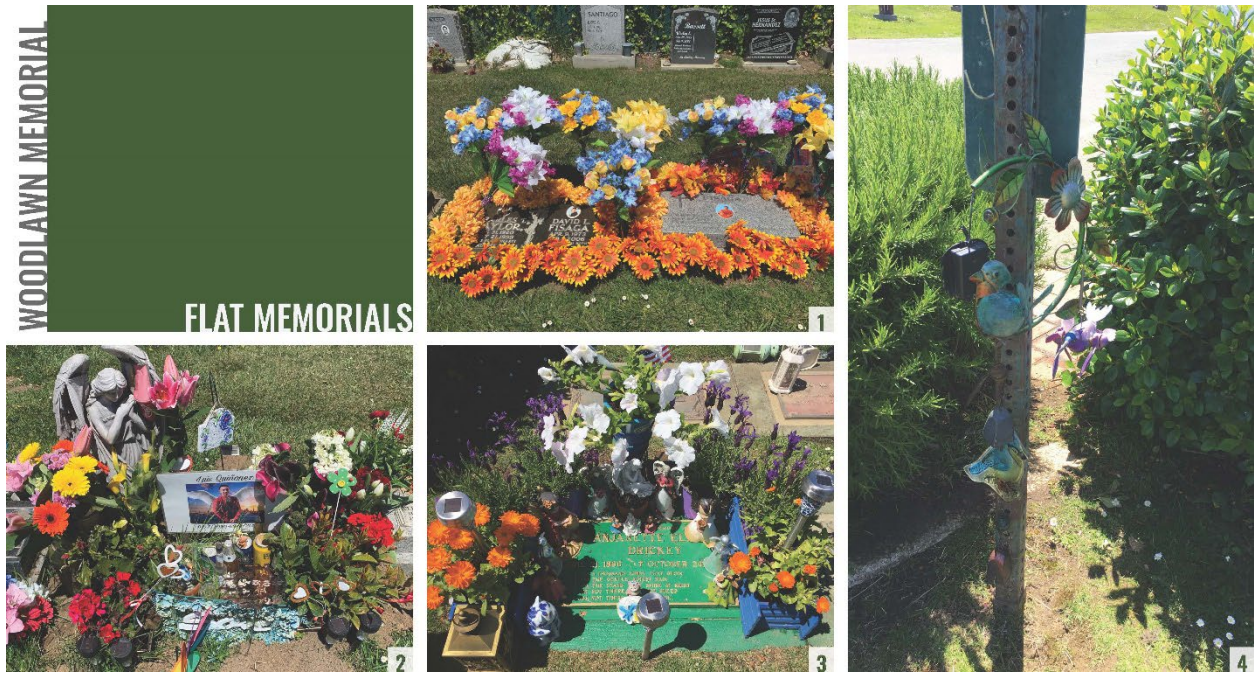


Figure 4.18 Woodlawn Memorial Park

WOODLAWN MEMORIAL
FLAT MEMORIALS

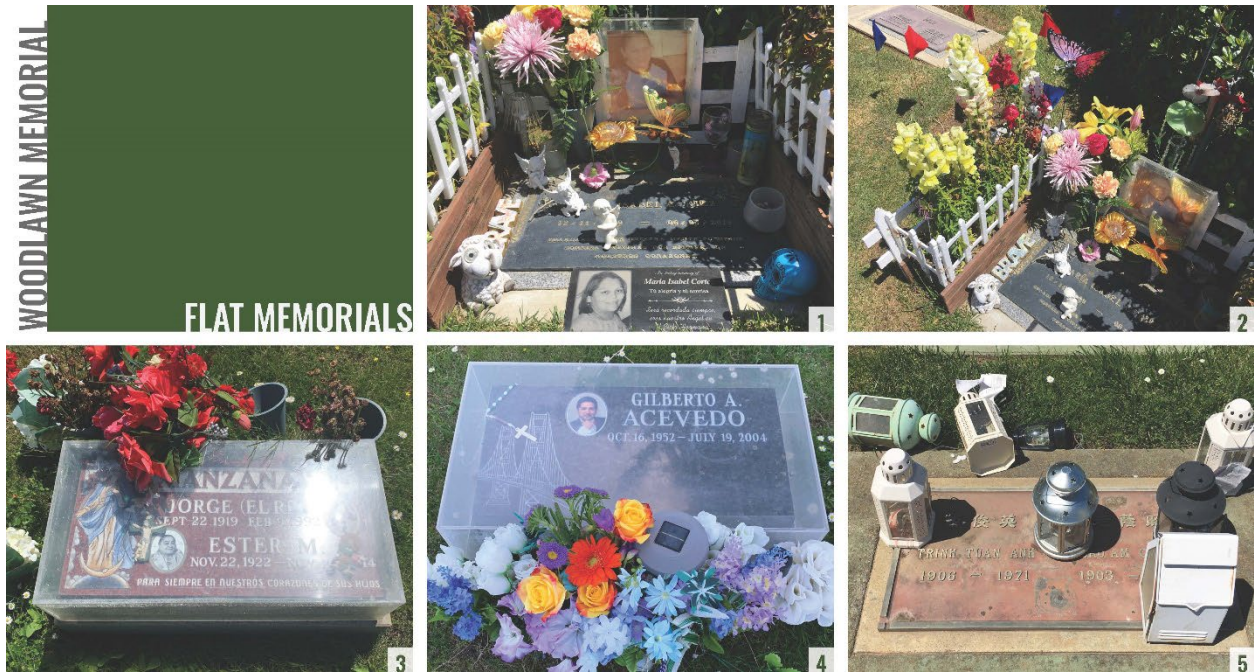


Figure 4.19 Woodlawn Memorial Park

Photos 1 and 2 in Figure 4.19 show potted plants bordering the grave. Plantings may be prohibited but visitors have found a way to bring them in without planting them into the ground. Photos 3 and 4 show protective coverings around the marker. The visitors may not be interested in maintaining the cemetery and even the area immediately outside their plot but here, the care of the visitor for the grave or the marker of the deceased is revealed.



Figure 4.20 Woodlawn Memorial Park

Photo 8 in Figure 4.20 shows a memorial marker with an image of the city, a picture of the deceased with a loved one, and a personal message. The memorial marker itself is a form of personal expression. It gives more information to the visitor about who is buried there.

WOODLAWN MEMORIAL
FLAT MEMORIALS



Figure 4.21 Woodlawn Memorial Park

WOODLAWN MEMORIAL
CHINESE MEMORIALS

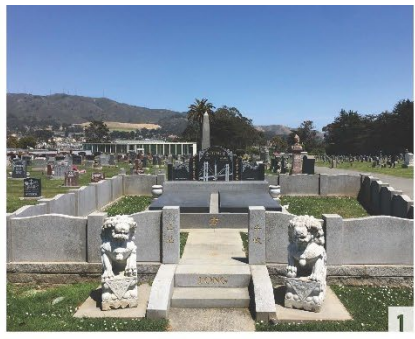


Figure 4.22 Woodlawn Memorial Park

Woodlawn Memorial Park represents different faiths and nationalities. There is freedom to express oneself based on your personal background. Figure 4.22 shows graves designed based on Chinese culture. These graves are placed around other graves of people who are of different nationalities and cultures. Cultural, ethnic, and religious diversity is seen throughout the cemetery.

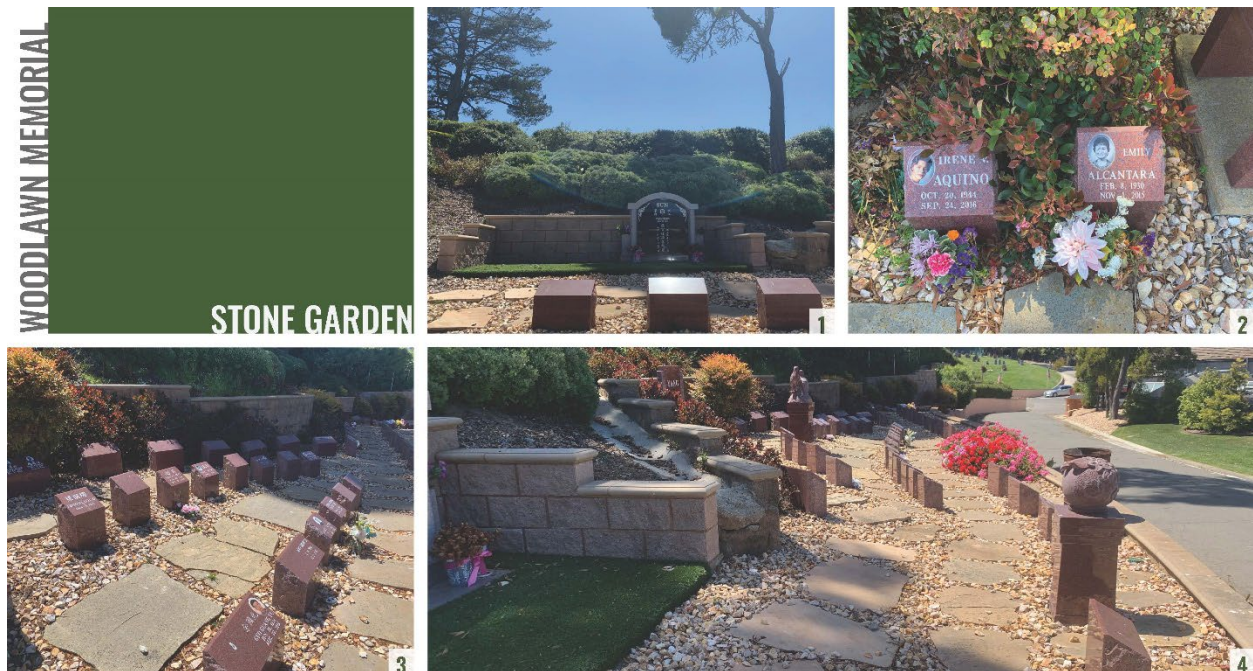


Figure 4.23 Woodlawn Memorial Park

Figure 4.23 shows another area of Woodlawn Memorial Park, the stone garden. There is minimal need for landscape maintenance because of the lack of turf. The issue is accessibility. It is in an area that is steep. It requires a few steps to get to this area. It would not accommodate many people when visiting a grave since the space is very tight. Markers have a smaller surface area although they are taller than other memorial markers. A few personal expressions were observed here including those in Photo 2.



Figure 4.24 Woodlawn Memorial Park

Figures 4.24 and 4.25 show some more examples of other graves. In Photos 2 and 3 of Figure 4.24, old graves are seen with tall monuments as memorial markers. The text engraved on these monuments gave some information about those buried. There were no objects left behind by visitors, but the monument gave some insight about the buried.



Figure 4.25 Woodlawn Memorial Park

Photos 2 and 3 in Figure 4.25 show examples of tombstones that were very personalized with pictures and images of the deceased’s interests in life.

4.1.4 Greek Orthodox Memorial Park

Address: 1148 El Camino Real, Colma, CA 94014

Date of Visit: May 31, 2021

Time of Visit: ~3:05pm

Photos and Notes:

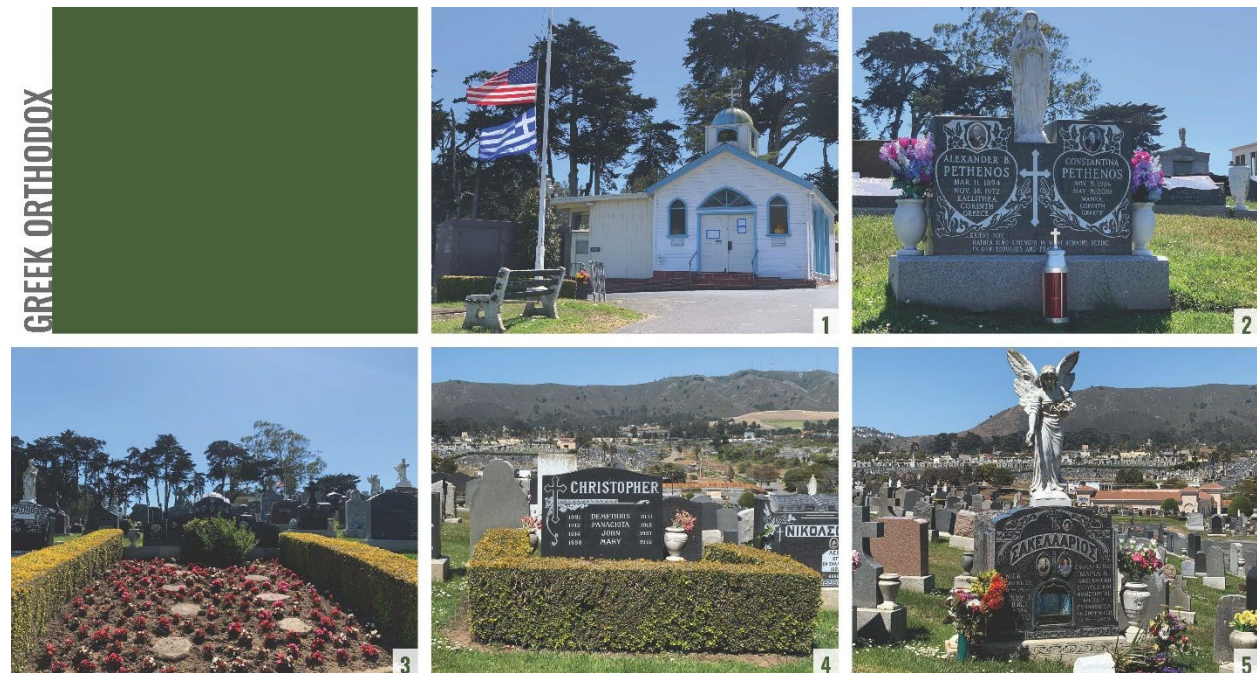


Figure 4.26 Greek Orthodox Memorial Park

The Greek Orthodox Memorial Park had a building near the entrance that used colors and forms that were reminiscent of Greece. The Greek flag was waving along with the U.S. flag. This is seen in Photo 1 of Figure 4.26. The cemetery was not as racially and ethnically diverse as the other memorial parks as mostly Greek people were buried in this cemetery. Greek candles were observed to be on many graves such as the one in Photo 2. Photos 3 and 4 show some landscaping on the cemetery plot. It seems as if this

is not prohibited. The hedges show the need of the visitors to delineate their space and provide for themselves a bit of privacy and a sense of ownership.

4.1.5 Mountain View Cemetery

Address: 5000 Piedmont Ave., Oakland, CA 94611

Date of Visit: May 31, 2021

Time of Visit: ~3:50pm

Photos and Notes:

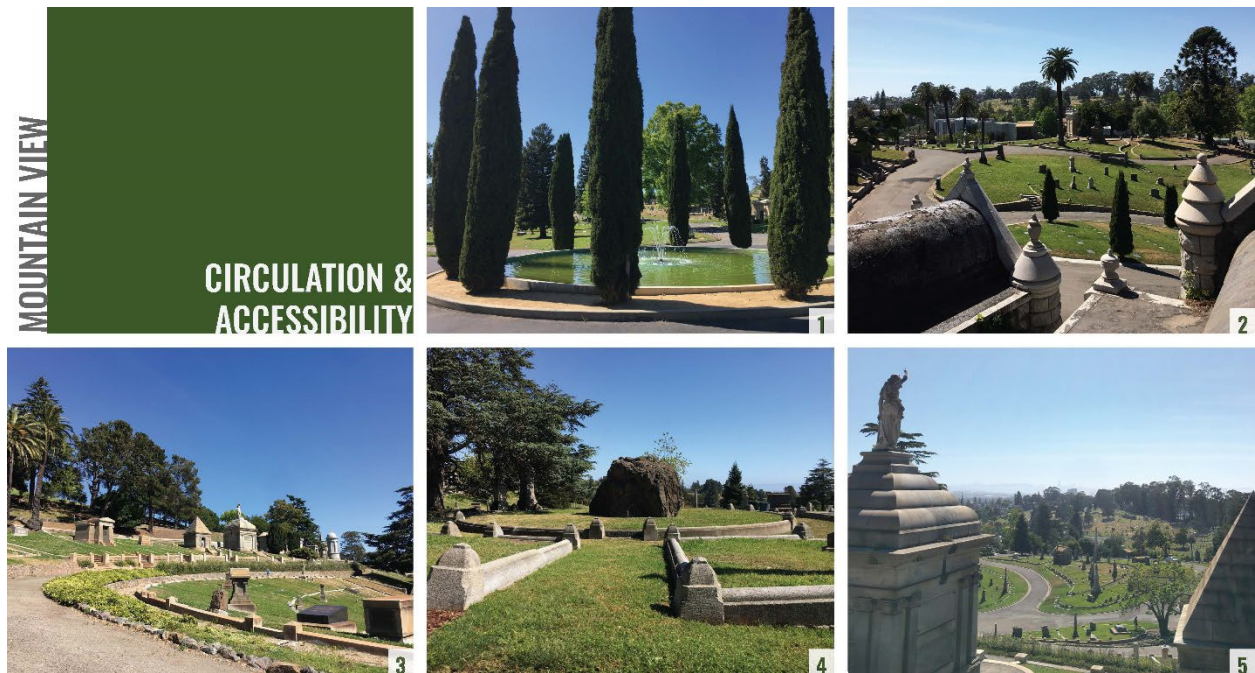


Figure 4.27 Greek Orthodox Memorial Park

Mountain View Cemetery was designed by Frederick Law Olmsted in 1863 (History, n.d.). Not many personal expressions were observed at this cemetery since there weren't many new graves. What was interesting to note though was the layout of the cemetery. There were paths for vehicles and many paths for pedestrians. It made cemetery plots easily accessible. Some paths were covered with turf but they were flat

and spacious enough to walk someone in a wheelchair through. The meandering paths provided a contemplative atmosphere.

4.1.6 Oak Hill Memorial Park

Address: 300 Curtner Ave., San Jose, CA 95125

1st Date of Visit: September 11, 2021

1st Time of Visit: ~2:30pm

2nd Date of Visit: November 14, 2021

2nd Time of Visit: ~4:40pm

Photos and Notes:

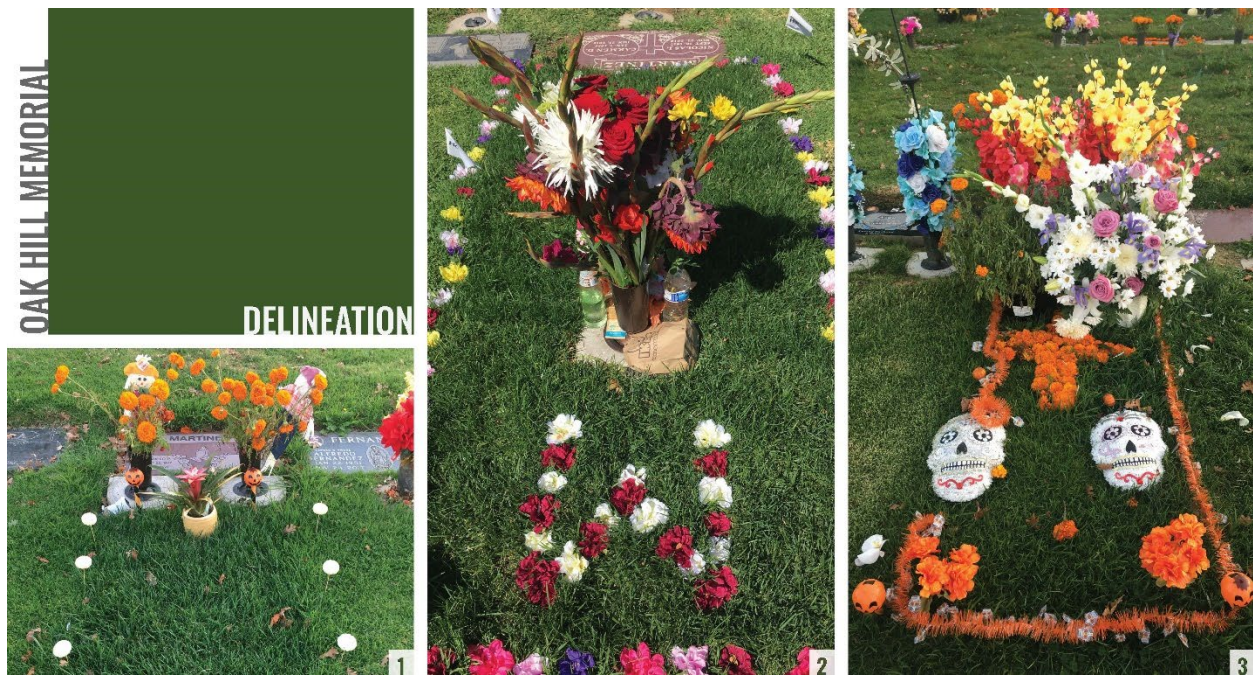


Figure 4.28 Oak Hill Memorial Park

Figure 4.28 shows how visitors like to delineate the grave of their loved ones. It provides a clear limit on where they can add decoration and personalization.



Figure 4.29 Oak Hill Memorial Park

Figure 4.29 shows that gatherings of numerous people take place at the cemetery. Photo 1 shows a family with food, drinks, lawn chairs, tables, and umbrellas. There is a need for umbrellas for shade since shade is very limited at the cemetery. This is due to the limited number of trees. Cemeteries tend to limit the number of trees in areas where there are plots so that the roots do not take up valuable space for graves. Photo 2 shows another large gathering with a band present playing music. Space is taken up over other graves to accommodate the large number of people. Photo 3 shows traces of people spending time at the grave.

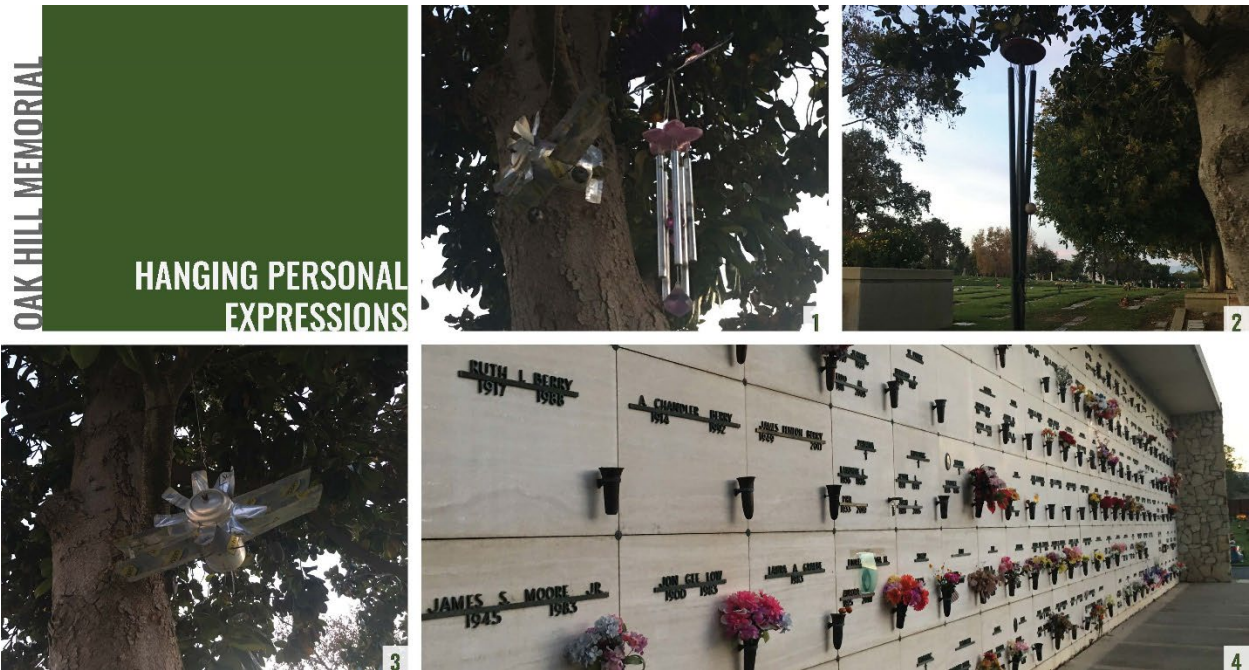


Figure 4.30 Oak Hill Memorial Park

Figure 4.30 shows objects that are hung when there is an available place to hang things. These elements may not be part of the cemetery plot but are nearby enough to use to hang personal things.

Figure 4.31 shows how special occasions such as birthdays and holidays are celebrated at the grave with decorations, food, drinks, candles, flowers, and other things that people leave behind. Figure 4.32 shows more examples of how graves are personalized with various objects that people leave for the dead.

OAK HILL MEMORIAL
HOLIDAY DECORATIONS



Figure 4.31 Oak Hill Memorial Park

OAK HILL MEMORIAL
PERSONALIZED GRAVES

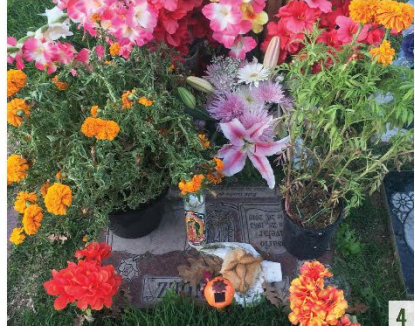


Figure 4.32 Oak Hill Memorial Park

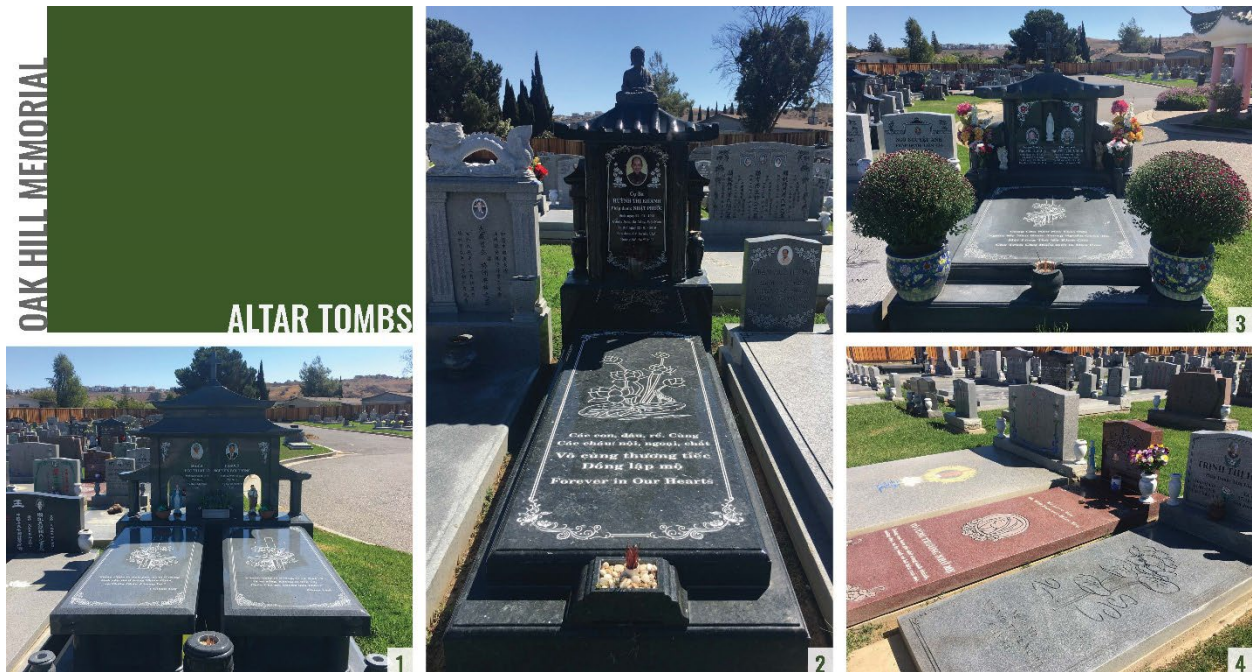


Figure 4.33 Oak Hill Memorial Park

Figure 4.33 shows some examples of graves that host altar tombs. Various images and text are engraved into the surface of the altar tombs revealing information on the buried. This style provides more space than the regular tombstone in sharing more information. However, it does take away some of the space that can be used for visitors to gather. Since plots are side-by-side, there is space mainly just in front of the plot for standing and viewing.

4.1.7 Los Gatos Memorial Park

Address: 2255 Los Gatos Almaden Rd., San Jose, CA 95124

Date of Visit: September 11, 2021

Time of Visit: ~3:25pm

Photos and Notes:

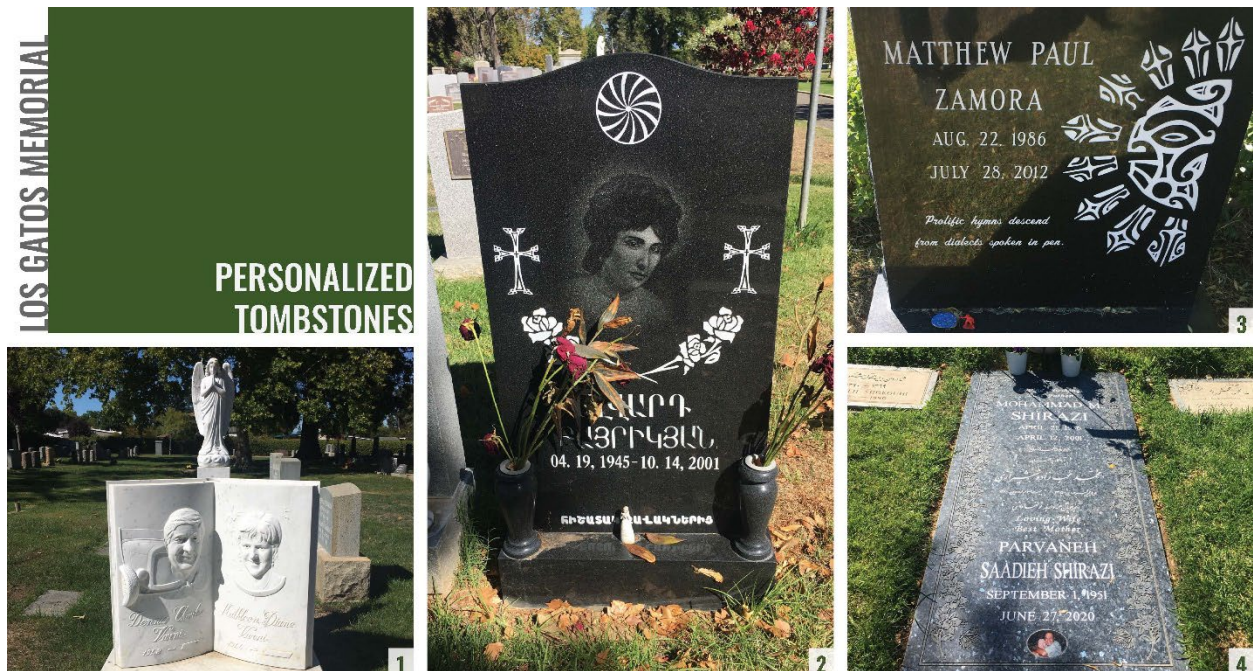


Figure 4.34 Los Gatos Memorial Park

Figure 4.34 shows examples of tombstones that are more personalized with text and images that share information about the buried. Photo 1 shows a tombstone in the shape of a book with the images of those buried there engraved in it. The man's image seems to have the front of a car showing behind his head, signifying maybe his interest in cars during his life. Photo 2 shows an image of a woman engraved in the tombstone giving visitors a recognizable face of the buried. There is also a spiraling symbol at the

top of the image in Photo 2 that may have been created by relatives to symbolize the buried with some special meaning. Text is engraved in a different language giving some indication of the deceased's native tongue and where she comes from. Photo 3 shows an image of a half of a sun drawn in some type of Polynesian, Pacific-Islander, or maybe even Filipino style. The text is poetic as it says, "Prolific hymns descend from dialects spoken in pen." This could possibly be an indication of the buried person's career or passion in his life to write. Photo 4 shows a large memorial marker with the names and an image of two people that seem to be married. There is text that is also engraved in a different language, possibly Farsi, giving an indication of who these people are and a little bit about their background.

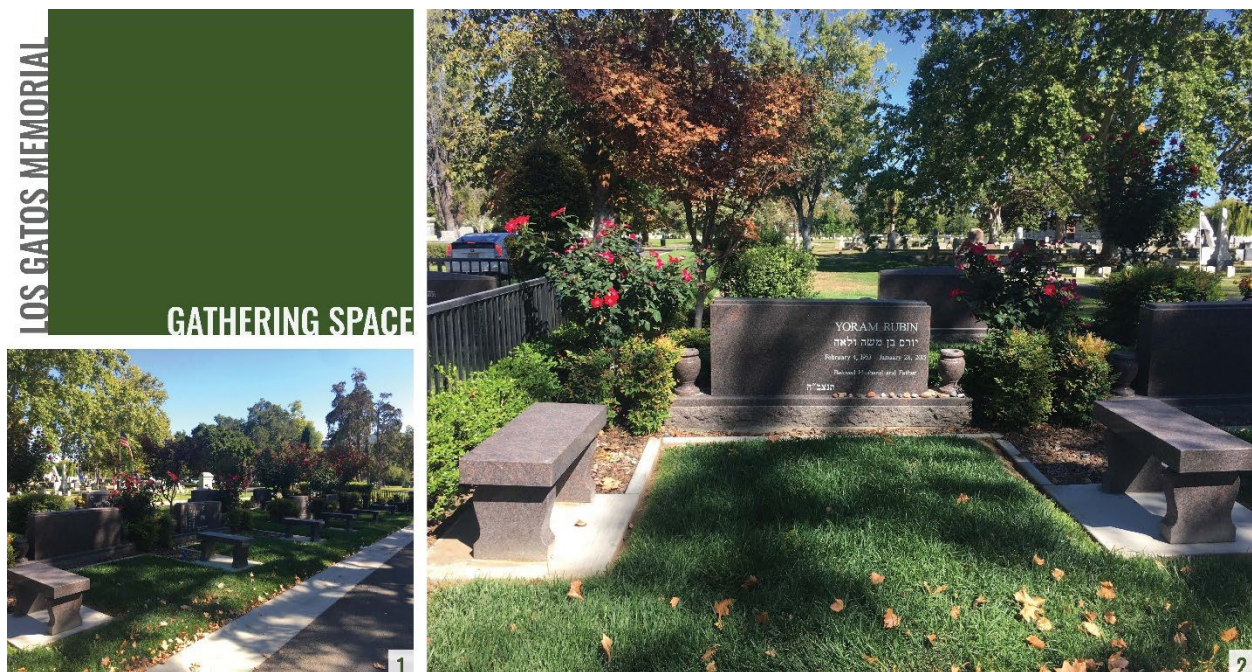


Figure 4.35 Los Gatos Memorial Park

Figure 4.35 shows a grave that can accommodate a gathering of people. There is enough space along with seating on both sides. It provides a room and a sense of privacy

for visitors. The space is delineated by the landscaping at the back and the path at the front. Some of these graves seemed to be empty. It may be that these cemetery plots are more expensive than the regular ones due to their size and their features.



Figure 4.36 Los Gatos Memorial Park

Figure 4.36 shows the graves of babies that have passed away. The size of the tombstones, the text and images on them, and the objects that are left behind give the space a soft and lighthearted feel that is very appropriate for the type of people that are buried there, in this case, babies. Photo 3 is a tombstone that displays quotes from Dr. Seuss and Kung Fu Panda. In the other photos, little toys and little stuffed animals are left behind aside from the things that are usually left behind at adult graves. The personal expressions visible here produce a different emotional impact than those on adult graves.

LOS GATOS MEMORIAL
PLANTINGS

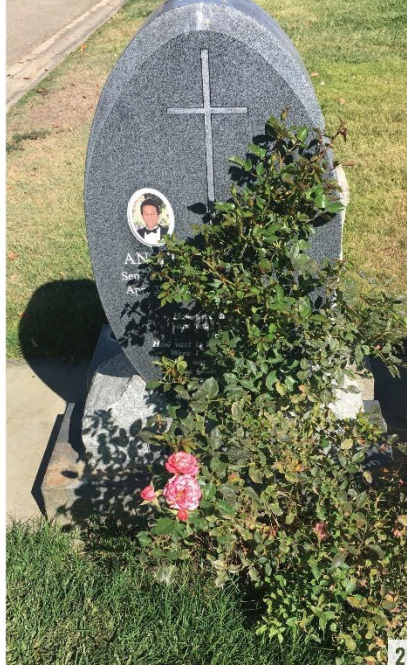


Figure 4.37 Los Gatos Memorial Park

Figure 4.37 shows graves where visitors have left potted plants. Photo 2 shows a rose bush rooted in the ground next to the tombstones. This may be prohibited but the plant is growing anyway. Flowering plants seem to be the choice here as they last longer than cut flowers.

4.1.8 Gate of Heaven Catholic Cemetery

Address: 22555 Cristo Rey Dr., Los Altos, CA 94024

1st Date of Visit: September 11, 2021

1st Time of Visit: ~4:20pm

2nd Date of Visit: November 7, 2021

2nd Time of Visit: ~4:42pm

Photos and Notes:



Figure 4.38 Gate of Heaven Catholic Cemetery

Figure 4.38 shows once again the desire of visitors to delineate the cemetery plot. The decorations and objects that people leave behind tend to stay within those borders that they create.



Figure 4.39 Gate of Heaven Catholic Cemetery

Figure 4.39 shows how food and drinks are often left by visitors at the grave. Photo 1 shows a bag of Circus Animal crackers left behind. Photo 2 shows a few bottles of beer and a bottle of wine. Photo 3 shows a can of Coke. Photo 4 shows bottles of water. Photo 5 shows a Starbucks coffee cup and water. At the bottom of the memorial marker is a burning cigarette held up vertically by the soil.



Figure 4.40 Gate of Heaven Catholic Cemetery

Figure 4.40 shows objects hanging from trees that are nearby to some graves.



Figure 4.41 Gate of Heaven Catholic Cemetery

Figure 4.41 shows more examples of graves that are personalized and decorated with objects that visitors have left.



Figure 4.42 Gate of Heaven Catholic Cemetery

Figure 4.42 shows examples of signs found around the cemetery that show some of the policies. Photo 1 shows the prohibition of the use of tents in the cemetery. It is not clear whether this is prohibiting a camping tent, a canopy tent, or maybe both. If a canopy tent is prohibited, that would eliminate an option for shade when people are gathering in areas where there is no shade provided by trees. Photo 2 shows a sign with the cemetery's flower policy. It informs visitors that the lawn is mowed all day on Wednesdays and that all flowers are removed during that time.

4.2 Phase 2: Case Study Site Selection

The casual observation conducted in Phase 1 uncovered many realizations about personal expressions at cemeteries. To achieve a more focused investigation, the researcher narrowed down the number of sites to 3 from the original 8 cemeteries visited. In these sites, systematic observation would be conducted for a closer look at personal expressions.

To select the 3 sites out of the 8 cemeteries visited, the researcher developed criteria (Figure 4.43) based on insights provoked by the casual observation conducted in Phase 1. It was predicted that the criteria chosen would yield substantial data from systematic observations at these selected sites.

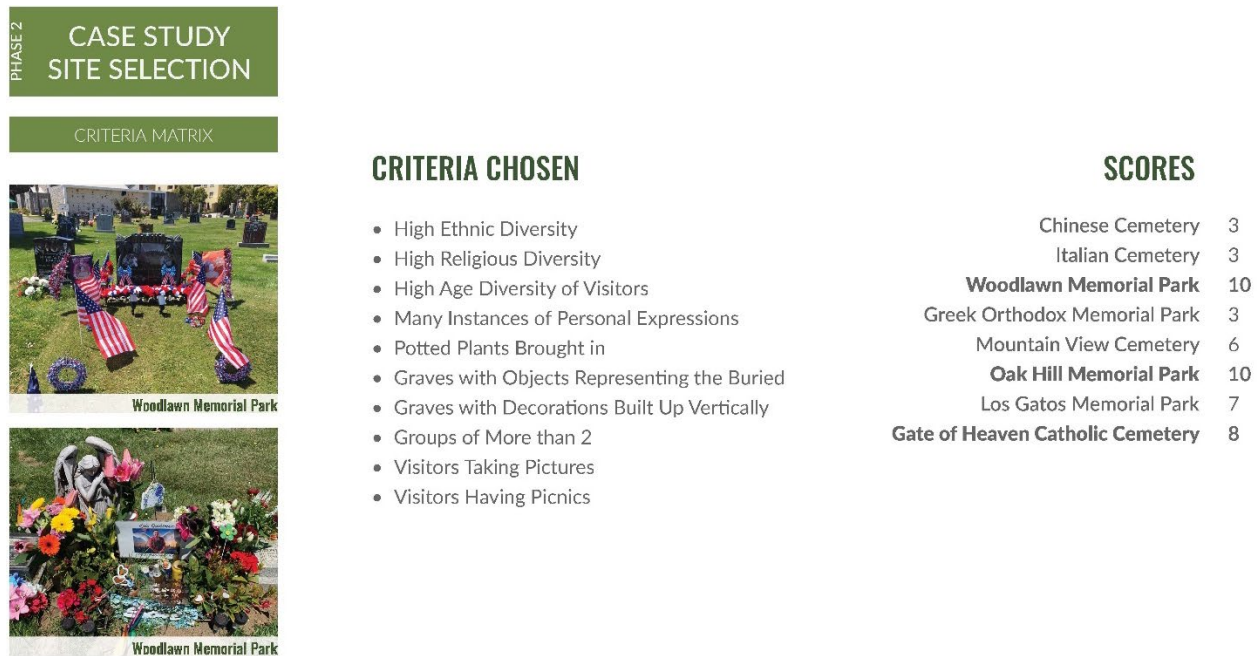


Figure 4.43 Criteria for Case Study Site Selection

To achieve the desired results from conducting systematic observation in the next phase, the cemetery sites had to have a strong presence of what needed to be observed. For the purposes of this research, the sites to be selected had to have a strong, substantial presence of people and objects that were left at the grave.

Furthermore, the diversity of what is observed at these sites was very important. Therefore, the researcher chose criteria that considered the type of people that visited these cemeteries. Did the site have numerous people visiting with high ethnic diversity, high religious diversity, and high age diversity? The researcher also chose criteria that related to some of the activities that visitors engaged in as observed in Phase 1's casual observation. Were the visitors at the cemetery taking pictures of the grave they decorated and taking pictures of themselves and the people they were with? Were they having picnics at the grave? Were there a lot of people in groups of more than 2?

The researcher considered the objects and things that people leave behind at the grave as well when choosing criteria for case study site selection. There had to be many instances of personal expressions at the grave. Did the cemetery have many potted plants brought in? Did graves have many objects on them representing the buried or representing what the buried meant to the people visiting them? Were there many graves where decorations were not just laid on the grave, but also built up vertically?

Cemeteries visited in Phase 1 were given one point for each of these criteria that the site met. The points were added, and this delivered the results shown in Figure 4.43. Woodlawn Memorial Park in Colma, California and Oak Hill Memorial Park in San Jose, California met all the criteria chosen by the researcher giving these sites a perfect score of 10. Gate of Heaven Catholic Cemetery followed with a score of 8. The cemetery may

not have had visitors with much religious diversity since it catered to the Catholic market, but it still met other criteria qualifying it to be selected as a case study site for systematic observation. The next section explains the results of the systematic observation conducted at these 3 case study sites.

4.3 Phase 3: Case Study Site Visits

The researcher documented observations in Phase 1 and listed down the data in preparation for a tally sheet to be used for systematic observation in Phase 3. Figure 4.44 shows the list of objects left at the grave that were recorded from photo documentation. It also lists the activities/behaviors that visitors engaged in as recorded from ethnograms/casual observation.



Figure 4.44 Recorded Observations

In Phase 3, the researcher visited the 3 cemetery sites that were selected in Phase 2 using the case study site selection matrix. These sites were Woodlawn Memorial Park visited on November 7th, 2021 at around 2:50pm, Gate of Heaven Catholic Cemetery visited on November 7th, 2021 at around 4:40pm, and Oak Hill Memorial Park visited on November 14th, 2021 at around 4:40pm. As the researcher walked around these cemeteries, observations were being tallied on tally sheets as they corresponded to the list items shown in Figure 4.44. Recordings for objects are based on the researcher visiting one grave at a time. Each item on the list was given one tally mark if at least one instance of the list item was observed at the grave. If there were more than one instance observed, it would remain recorded as solely one tally mark. The observations regarding people and their activities/behaviors were not based on researcher going from grave to grave since observations were made from a distance, usually from the researcher's vehicle. One tally mark was recorded for each instance of the activity/behavior observed.

Data gathered were then synthesized using spreadsheets. Tables 4.1 and 4.2 show the results at each cemetery site.

Activities/Behaviors	Gate of Heaven	Oakhill	Woodlawn	TOTAL
Cleaning	4	6	5	15
Drinking	2	2		4
Eating	2	1		3
Gathering		2	9	11
Going Around in Golf Cart			5	5
Holding Umbrellas				0
Kissing Hand and Touching Tombstone		1		1
Kneeling		5		5
Laying Flowers Down	6	6		12
Laying Fruits Down				0
Laying on Blanket	2			2
Looking Down at Tombstone	13	11	2	26
On Cellphone		1	2	3
Others				0
Picnic	1			1
Playing			4	4
Praying		3	1	4
Preparing for Picnic				0
Setting Up Grave Fences				0
Setting Up Lawnchairs				0
Singing as a band		1		1
Sitting on Blanket	2	2		4
Sitting on Lawnchairs		3	3	6
Standing	4	4	10	18
Taking Photos	1	3	1	5
Talking		5	2	7
Walking	2	3	2	7
Walking Back to Car	2	2	2	6
Walking with Flowers				0

Table 4.1 Tally Results for Activities/Behaviors

Objects	Gate of Heaven	Oakhill	Woodlawn	TOTAL
Artwork				0
Balloons	3	3	2	8
Bench				0
Candles	7	12	4	23
Chimes	2			2
Cigarette		1		1
Coolant			1	1
Décor	1		1	2
Drinks/Cups	7	9	8	24
Fake Animals	3	3	2	8
Figurines	1	1	6	8
Flags	1	2	8	11
Food	1	9		10
Fresh Flowers	22	23	24	69
Fruits	1	2	7	10
Holiday Decorations	10	20	8	38
Incense			7	7
Jewelry	1		1	2
Lanterns	5	3	5	13
Lawn Chairs		1		1
Magazine			1	1
Messages	2	2	2	6
Mini-Fences	2	2	2	6
Other				0
Pictures	4		10	14
Pinwheels	7	5	9	21
Plastic Flowers	9	14	31	54
Potted Plants	15	4	18	37
Religious Objects	1		8	9
Ribbons	1			1
Sports Objects	1		1	2
Suspended				0
Table				0
Toys		4	5	9
Trophies/Medals			1	1
Water				0
Wreaths			8	8

Table 4.2 Tally Results for Objects Left at Grave

Once the results were synthesized, the researcher then ranked them to see what the top activities and what the top objects left at the grave were. This can be seen in Tables 4.3 and 4.4 and visualized in graphs in Figures 4.45 and 4.46.

TOP ACTIVITIES/BEHAVIORS	
Looking Down at Tombstone	26
Standing	18
Cleaning	15
Laying Flowers Down	12
Gathering	11
Talking	7
Walking	7
Sitting on Lawnchairs	6
Walking Back to Car	6
Going Around in Golf Cart	5
Kneeling	5
Taking Photos	5
Drinking	4
Playing	4
Praying	4
Sitting on Blanket	4
Eating	3
On Cellphone	3
Laying on Blanket	2
Kissing Hand and Touching Tombstone	1
Picnic	1
Singing as a band	1
Holding Umbrellas	0
Laying Fruits Down	0
Preparing for Picnic	0
Setting Up Grave Fences	0
Setting Up Lawnchairs	0
Walking with Flowers	0
Others	0

Table 4.3 Top Activities/Behaviors Observed

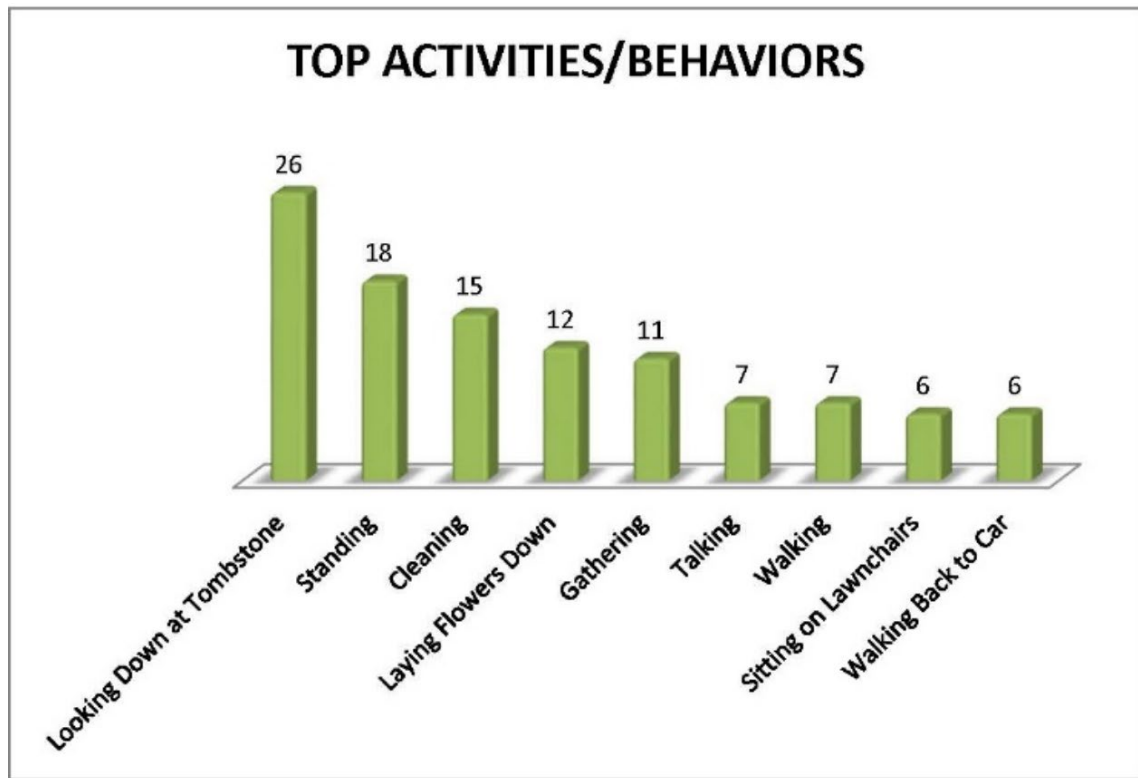


Figure 4.45 Top Activities/Behaviors Observed

Objects Most Left at Grave	
Fresh Flowers	69
Plastic Flowers	54
Holiday Decorations	38
Potted Plants	37
Drinks/Cups	24
Candles	23
Pinwheels	21
Pictures	14
Lanterns	13
Flags	11
Food	10
Fruits	10
Religious Objects	9
Toys	9
Balloons	8
Fake Animals	8
Figurines	8
Wreaths	8
Incense	7
Messages	6
Mini-Fences	6
Chimes	2
Sports Objects	2
Décor	2
Jewelry	2
Cigarette	1
Lawn Chairs	1
Ribbons	1
Coolant	1
Magazine	1
Trophies/Medals	1
Artwork	0
Bench	0
Suspended	0
Table	0
Water	0
Other	0

Table 4.4 Objects Most Left at Grave

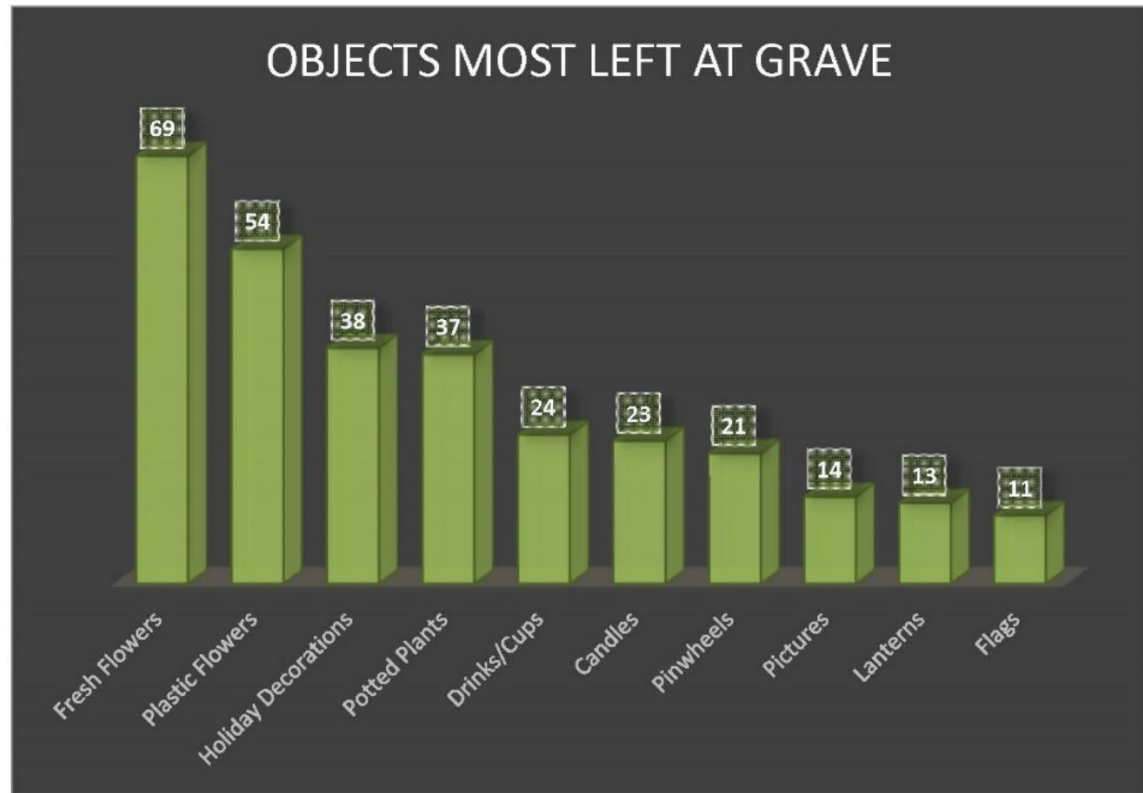


Figure 4.46 Objects Most Left at Grave

4.4 Synthesis

After processing and reviewing all the data gathered, the researcher was then able to determine the successful and unsuccessful features found at the cemeteries. The purpose of this master's design thesis is to determine the design features and elements necessary for a cemetery that is transformed by the personal expressions exhibited by visitors after the day of burial to be able to develop a new kind of cemetery typology. The following insights were derived and aided the researcher in developing the design:

4.4.1 Successful Features

- Gravestones Designed as Personal Expressions and *for* Personal Expressions



Figure 4.47 Gravestones Designed as Personal Expressions

Every grave at each cemetery visited had some type of marker for the buried. Some gravestones have just the buried person's name along with the date of their birth and the date of their death. Other gravestones (Figure 4.47) have engravings, symbolic images, pictures, quotes, and other elements that represent either the person buried or the love and sentiments of the buried person's loved ones. The form can also be an expression of someone's religion or give insight into one's nationality. This is an important feature to note since it is usually the gravestone, as compared to other forms of personal expressions at the grave, that can last decades and even centuries with the right material and care. It can inform and give insight into who is buried there at the grave even to people visiting hundreds of years from now. There is a big opportunity for people to take advantage of expressing their emotions and sentiments towards their deceased loved ones through gravestone design. It can be more than just a dash between the dates of their birth and their death. The dash, representing the life lived, can be interpreted more for visitors as the gravestone is designed as personal expression in terms of its content as well as its form.

It was also observed that cemeteries have been and are being transformed already by the personal expressions of people to some extent as specifically seen on the gravestone. Visitors leave many things at the grave such as flowers or incense. Figure 4.48 shows some examples of the gravestone design considering some of the rituals or practices of visitors and some of the objects they leave behind. Some gravestones had small holes in them to place incense. Some had bigger holes on the sides to place flowers in. At Oak Hill Memorial Park, the flat memorial markers had a vase that you could turn upright from the ground to put flowers in. There is an opportunity for gravestone designers

to understand the various personal expressions of visitors to be able to incorporate features into the gravestone that accommodate, and maybe even encourage more personal expressions at cemeteries.



Figure 4.48 Gravestones Designed for Personal Expressions

- Vertical Elements

When the Memorial Park cemetery typology was introduced in 1917 at Forest Lawn Memorial Park in Glendale, California, the monuments and upright gravestones were done away with and replaced with memorial markers that were almost flush with the lawn. It was designed to blend in so that it looked like one uninterrupted pastoral landscape of turf grass. Memorial markers were prevalent in the cemeteries that were observed. It was interesting to note that even though these gravestones were flush to the

ground, visitors still managed to find a way to make the grave more visible through personal expression. Visitors would stake objects into the ground such as pinwheels, flowers, or plastic animals that floated in the air. They would put lanterns, candles, religious objects, holiday decorations, and many other things on the gravestone. This showed the desire of visitors to display their personal expression for the buried and share it to the public as well.

Many graves did not have vertical elements readily available at the grave for them to decorate and embellish but when there are vertical elements nearby, visitors are inclined to use them for personal expression as seen in Figures 4.49 and 4.50. Sometimes nearby, there would be a fence, or a tree, or maybe even a signpost. Whatever it was, visitors found a way to extend their personal expressions beyond the plot by hanging things. In these areas, there would be objects that aren't usually observed at other graves that do not have that vertical element. These areas were observed to have flower wreaths, chimes, and suspended crafts to name a few. Vertical elements are a good feature to have at graves for adding another dimension to the beauty of personal expression for all to see.



Figure 4.49 Vertical Elements



Figure 4.50 Vertical Elements

- Personal Maintenance

Cleaning was the Top 3rd activity/behavior observed in the systematic observation conducted at the 3 case study sites. Several instances of people cleaning the grave were observed at each of those sites. This shows a sense of ownership of visitors in maintaining their own cemetery plot. The act itself is a form of personal expression as care, honor, and respect for their buried loved one. Knowing this can transform the way cemetery management and maintenance is set up. Maintenance is involved in mowing the lawn around gravestones and for maintenance professionals to do that effectively, the objects left at the grave as personal expressions need to be cleared. There is an opportunity in minimizing maintenance costs for the corporation and for the people paying for the cemetery plot. More responsibility in grave maintenance can be given over to the family/plot owner and this in turn, can allow more freedom in personal expression by visitors.

4.4.2 Unsuccessful Features

- Lack of Delineation

Many graves were observed to be delineated by visitors using flowers, decorations, mini-fences, plants, and other objects. There seems to be a desire for visitors to do this as it gives them a clear boundary of where they can decorate up to if they want to maximize the space on their plot for the objects they want to leave behind. One reason this is done is to maybe avoid encroaching on the plot of other people out of respect and consideration. In delineating the cemetery plot, the space becomes defined into an outdoor room of their own of some sort. It gives a sense of privacy and ownership allowing

them the freedom to express themselves the way they would like or prefer to in relation to those who are buried.



Figure 4.51 Delineation

Figure 4.51 shows examples of the delineation observed at cemeteries. The cemetery does not often provide this visible delineation on the ground and must be created by visitors themselves. If there was delineation, it was often due to the cemetery plot owner's design decisions, usually at more formally constructed graves which probably cost more for the customization. If cemeteries provided this feature, it would help visitors become less hesitant in using up all the space that they own for personal expression. It would save them the hassle of looking up the boundaries of their cemetery plot and provide them more time to be with their deceased loved one at the grave.

- Missing Features and Elements for a Gathering Space



Figure 4.52 The Plot as Gathering Space

In Phase 3, it was determined from systematic observation that “gathering” was the Top 4th activity/behavior at the cemetery. People who were gathered had brought in lawn chairs, umbrellas, coolers, tables, food, drinks, and other elements and features needed for an effective gathering. Otherwise, the conditions provided by the cemetery would not have been conducive for families and friends gathering at the grave.

First, there is a lack of space at the cemetery plot. A regular plot is usually 2’ x 8’. It is just enough to fit the body of the deceased in the ground. Sometimes, families buy several plots and so that may help in terms of gathering. There is also some flexibility as a group can expand outside of the plot onto other people’s graves. This shows though that these cemeteries have not designed for groups gathering at the grave but have

mainly just considered the space for the dead when planning the plot size. The living are also users of the cemetery and must be considered in the design and plot sizing.

Altar tombs, those graves with raised tombs above the ground, take up the whole plot leaving just room at the feet of the grave for visitors to stand and view. It does not consider whether the visitors will be using the space to gather in or not. When using this type of tomb, it is important for a designer to assess the needs and desires of the visitors and balance the space utilized for the dead and for the living.

Second, aside from the lack of space, the cemetery plot must also provide the features and elements needed for people to use the space for gathering. These include features for shade, seating, and/or tables. An assessment should be made to determine what the plot owner's needs and desires are and how it will be utilized throughout the years. If these features aren't provided by the cemetery, there should at least be space to accommodate these features when they are brought in by visitors themselves.

There were several groups of more than 2 observed at every cemetery. These groups of people were paying quick visits at the grave. "Looking down at the tombstone" and "Standing" were the Top 1st and 2nd activities/behaviors respectively that visitors engaged in. How would it change if cemetery plots were bigger in size and had the features and elements of a gathering space like shade and seating? This could encourage visitors to spend more time in personal expression for their buried loved ones and increase the quality time they spend with their families and friends that they visit with.

- Rules Conflicting with Personal Expressions



Figure 4.53 Rules Conflicting with Personal Expressions

The cemetery provides a landscape where people can go and express their emotions and sentiments towards a deceased loved one at their grave. The activities that they engage in, the people they choose to be with when they visit, and the objects they leave behind are all forms of personal expression. Observing these things is a look into cultural rituals and practices as they relate to death. When there are cemetery rules and policies that conflict with this, it hinders the freedom of people to express themselves at the grave.

Figure 4.53 shows different examples of the rules/policies that conflict with personal expressions of visitors. One example is the policy to clear all flowers on a certain day of the week to allow mowing of the lawn to be done. This prioritizes the lawn aesthetic

over cultural and spiritual value. The visitor would have to think twice about spending money on flowers or other objects to leave at the grave. If the visitor would want it to remain on the grave for as long as possible, it would only last up to a week before the objects are removed and thrown away.

Another example is the prohibition of planting anything in, around, or upon any portion of the burial plot. Potted plants ranked 4th in objects most left at the grave. People love to leave potted plants at the grave and sometimes, as observed, they end up planting it into the ground or into the holes at the bottom of the tombstone. If this helps them through the situation of death, it should be allowed and designed for. Of course, there should be some parameters but if it is something that is practiced, it should not be prohibited. It would just require cemetery plots to be designed while considering an ritual or practice such as this.

Instead of prohibiting certain rituals or practices that can hinder personal expressions, cemeteries should be designing to accommodate them. The main purpose of the cemetery should be for its users, whether dead or alive, rather than just for a prescribed aesthetic, ease of maintenance, or for more profit.

- Inaccessibility



Figure 4.54 Inaccessibility

The observations made in this study revealed that there is a wide diversity in the age of people that visit the cemetery. Babies in strollers, senior citizens in wheelchairs, children skateboarding on the road and running around on the grass, middle-aged adults kneeling at the grave, younger adults having drinks, and many more people of all various ages were observed to be present. Although the hills and the pastoral landscape of turf grass may be the way most cemeteries are designed, it does not always make it easy on certain people to be able to access the grave they would want to visit.

The researcher observed a man who looked to be in his 90s exiting his car while being assisted by 2 other ladies who were maybe in the same age range as well but maybe a little younger and stronger. The man was assisted onto the wheelchair and after several minutes of pushing uphill, the 2 ladies were then able to get him to the grave on

a steeply sloped area. The picturesque landscape may be perceived as beautiful to many but if a cemetery is to encourage the personal expressions of people, the cemetery should be designed so that any type of person can easily access the grave they would like to. If it is inaccessible or difficult to access like a wheelchair going several feet deep into a big expanse of lawn, then it hinders people from visiting the grave and expressing themselves there before their buried loved one.

It is also important to design cemeteries for the objects that people leave behind. If the grave is on a steep slope, the plot must be designed in a way where the objects wouldn't just roll down the hill. The Chinese Cemetery that was observed in this study had a very steep slope in some areas. Some graves adapted to that and included flat concrete pads in front of the gravestone for visitors to leave objects such as metal buckets for burning things, fruits, flowers, drinks, and other objects. Those areas that weren't adapted to the terrain had very minimal evidence of personal expression. If there were any objects left behind recently, they would have just rolled downhill. To design for the objects and for the people visiting is to design to preserve rituals and practices in death and grieving.

4.5 Summary

In this chapter, the data gathered from the methodology that was applied was processed and analyzed in phases. Phase 1 showed and described the observations gathered from the initial cemetery site visits. In Phase 2, the insights derived from Phase 1 informed the site selection process for case study sites. A criteria matrix was developed, and the 8 cemetery sites were narrowed down to 3. At the 3 cemetery sites, systematic

observation was then conducted. This was Phase 3 and this produced data on the top activities/behaviors and the top objects left at the grave.

All this processed information was then synthesized to determine the successful and unsuccessful features cemeteries had when it came to the freedom for personal expression by visitors after the day of burial. These were the successful features that were determined in the synthesis:

- Gravestones Designed as Personal Expressions and *for* Personal Expressions
- Vertical Elements
- Personal Maintenance

These were the unsuccessful features that were determined in the synthesis:

- Lack of Delineation
- Missing Features and Elements for a Gathering Space
- Rules Conflicting with Personal Expressions
- Inaccessibility

The findings in this chapter are sufficient to begin the design process. Chapter Five will discuss this design process as it begins with the site selection, site analysis, conceptual design, and will conclude with the final design as the main deliverable of this study.

CHAPTER 5: DESIGN

The data gathered from this investigation was helpful in achieving the purpose of this master's design thesis to determine the design features and elements necessary for a cemetery that is transformed by the personal expressions exhibited by visitors after the day of burial. Chapter Four revealed the findings from the methodology used and these findings were analyzed and synthesized to provide information for designing a new cemetery typology.

Chapter Five applies the information derived from Chapter Four to the final output of this study, which is a site design. This chapter discusses the design process that leads to the site design. This includes the site selection, site analysis, and finally, the conceptual and site design.

5.1 Site Selection

The study was conducted in the state of California as it hosts some of the most racially and ethnically diverse cities in the United States (US News, 2020). It was delimited to the San Francisco Bay Area. To determine which city should be selected to place a new cemetery typology in, the researcher looked at the most racially and ethnically diverse cities in the United States. Oakland and San Jose were found to be in the Top 10 while San Francisco was in the Top 20. Figure 5.55 shows this information.

SITE SELECTION

66 U.S. cities with a population of more than 300,000, ranked by change in racial and ethnic diversity between 2010 and 2018.

CRITERIA: DIVERSITY

City	Diversity Index Score (2018)	Change in Diversity (2010-2018)
1. Stockton, California	0.84	0.10%
2. Oakland, California	0.82	0.90%
3. Sacramento, California	0.81	1.50%
4. New York, New York	0.79	0.90%
5. Long Beach, California	0.78	-1.70%
6. San Jose, California	0.78	0.30%
7. Houston, Texas	0.77	-1.20%
8. Los Angeles, California	0.76	-1.40%
9. Fresno, California	0.75	-3.70%
10. Chicago, Illinois	0.75	-1.10%
11. Honolulu, Hawaii	0.73	6.40%
12. Dallas, Texas	0.73	-3.40%
13. Arlington, Texas	0.73	3.60%
14. Boston, Massachusetts	0.73	4.40%
15. Las Vegas, Nevada	0.72	5.20%
16. Milwaukee, Wisconsin	0.72	3.50%
17. Aurora, Colorado	0.72	3.70%
18. Fort Worth, Texas	0.72	0.72%
19. San Francisco, California	0.71	1.60%
20. Philadelphia, Pennsylvania	0.71	4.30%

(US News, 2020)



City	% Minority
2. Oakland, California	64.50%
6. San Jose, California	60.10%
19. San Francisco, California	47.20%

(ESRI Demographic Forecast Block Groups data, 2020)

Figure 5.55 Racial and Ethnic Diversity

SITE SELECTION

CRITERIA: PARKS

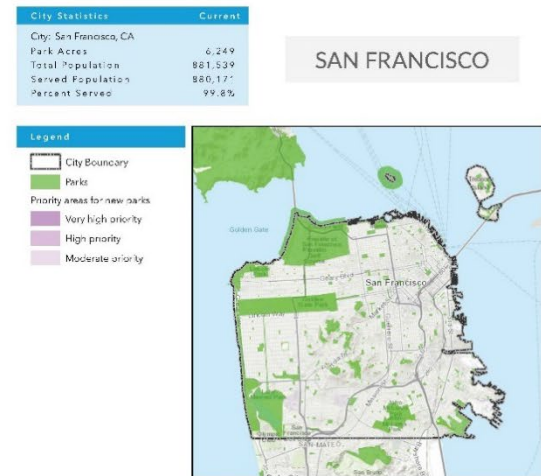
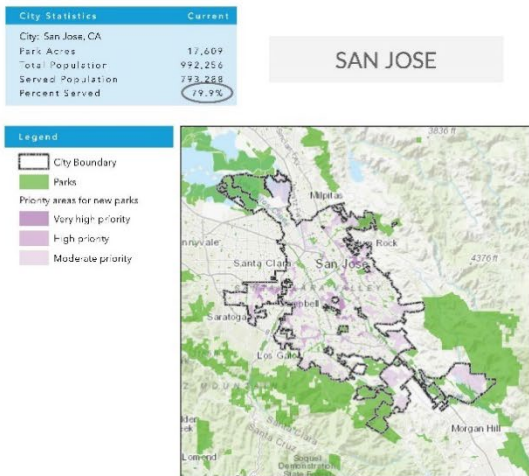
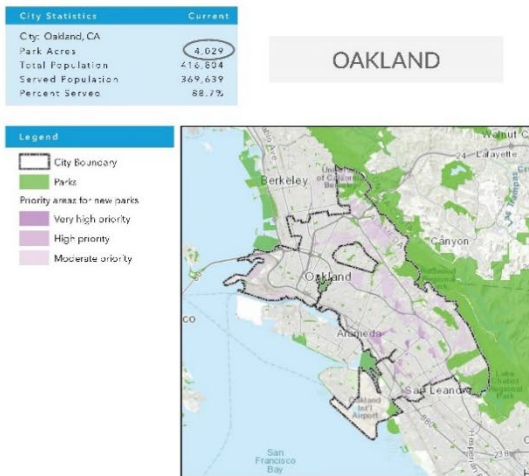


Figure 5.56 Parks: Oakland, San Jose, & San Francisco

(Trust for Public Land, 2021)

The researcher looked at the park coverage in these 3 cities. Figure 5.56 shows how Oakland had the least amount of park coverage with only 4,029 park acres. San Jose had the smallest percentage of the population served by parks with only 79.9% but they had a high coverage with 17,609 park acres.

The number of cemeteries in each city were also reviewed. San Francisco had only 2 and they are historical cemeteries. The city buries its dead in a city south of San Francisco. Oakland had 10 and San Jose had 16 cemeteries (Figure 5.57).



Figure 5.57 Cemeteries: Oakland, San Jose, & San Francisco

The susceptibility of these cities to displacement due to gentrification was also investigated in selecting a site. There were many areas on the East Bay that were low-income areas that were susceptible to displacement. Oakland, located on the East Bay, was shown to be advancing in gentrification in many areas of the city. This can be seen in Figure 5.58.

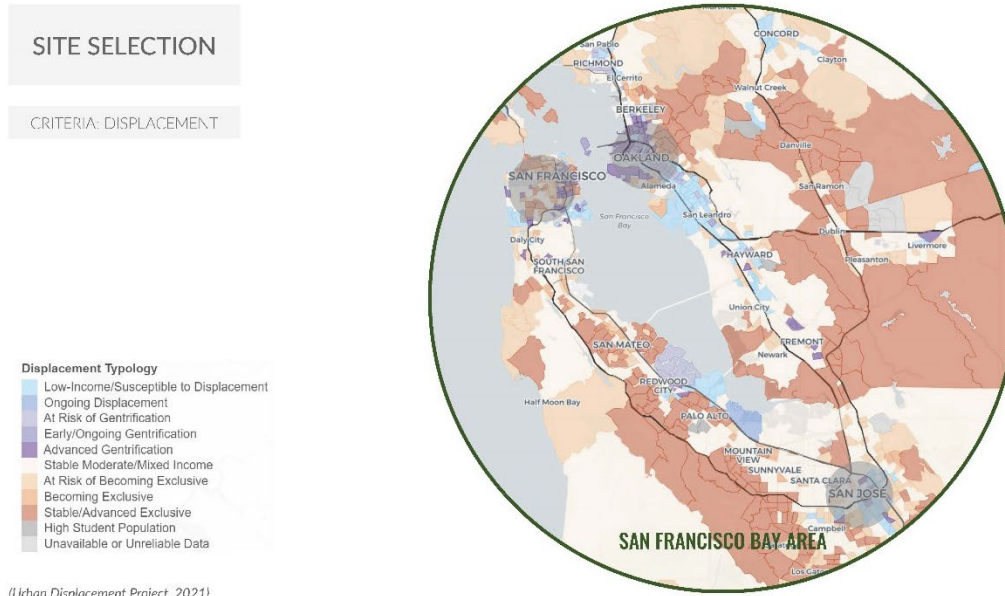


Figure 5.58 Urban Displacement Map: San Francisco Bay Area

With all this data and information, the researcher decided to select Oakland (Figure 5.59) as the city to build a new cemetery typology in. The most prominent cemeteries in history that were established around the mid-1800's onwards catered mainly to a Caucasian market with its Euro-American design. This would showcase the picturesque landscape and eventually evolved to a pastoral landscape with its geometric rows of graves. The researcher wanted to design a cemetery that would be transformed by the personal expressions of visitors and to choose Oakland would be choosing a city where there was the highest percentage of minorities among the 3 cities being chosen from. With minorities representing 64.5% of the city population, Oakland is an ideal place to introduce a new type of cemetery that shows what a cemetery would look like if it represented an ethnically and racially diverse population.

SITE SELECTION

CITY SELECTED:
OAKLAND, CA

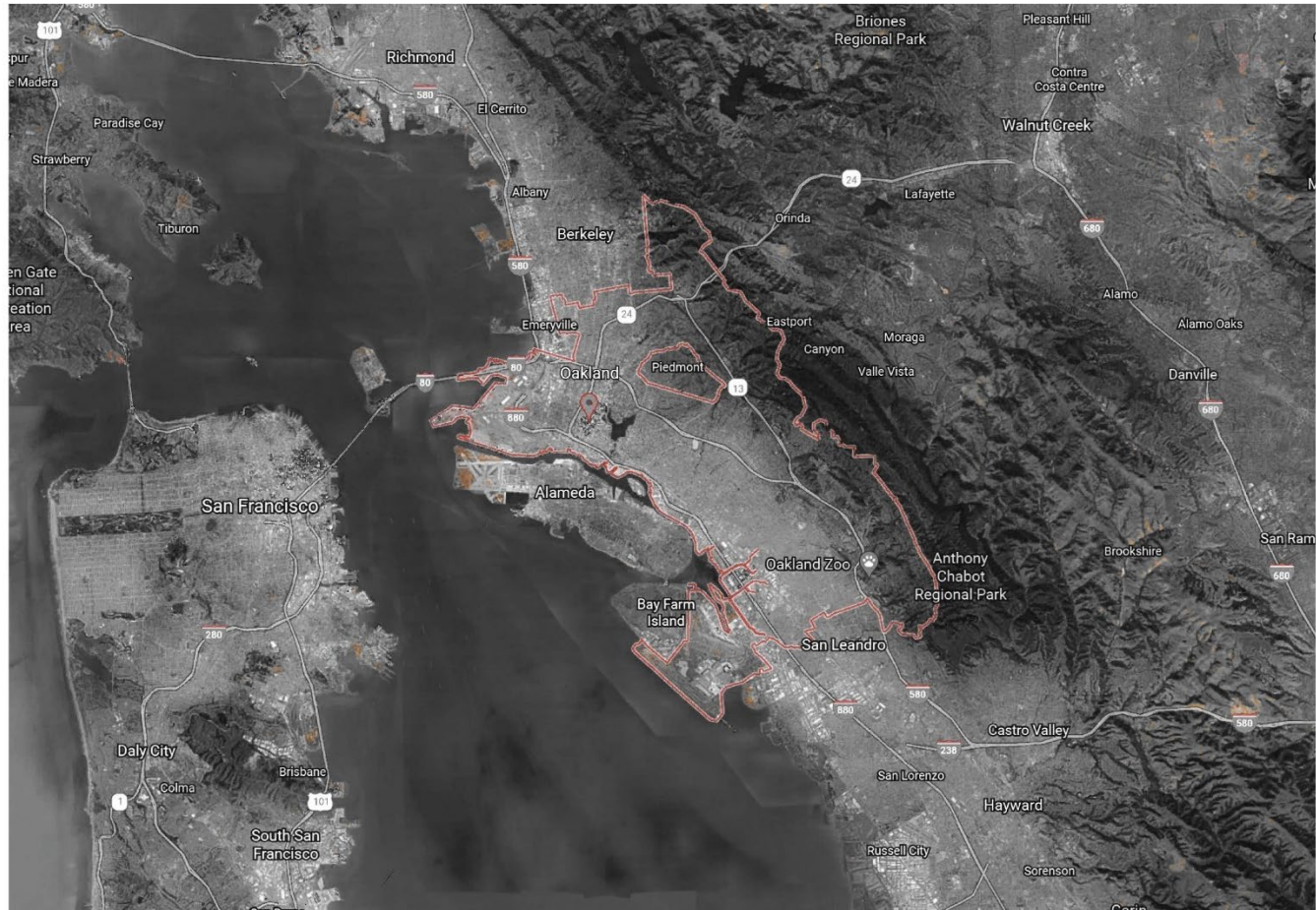


Figure 5.59 City Selected: Oakland

SITE SELECTION

SITE SELECTED:
OAKLAND COLISEUM

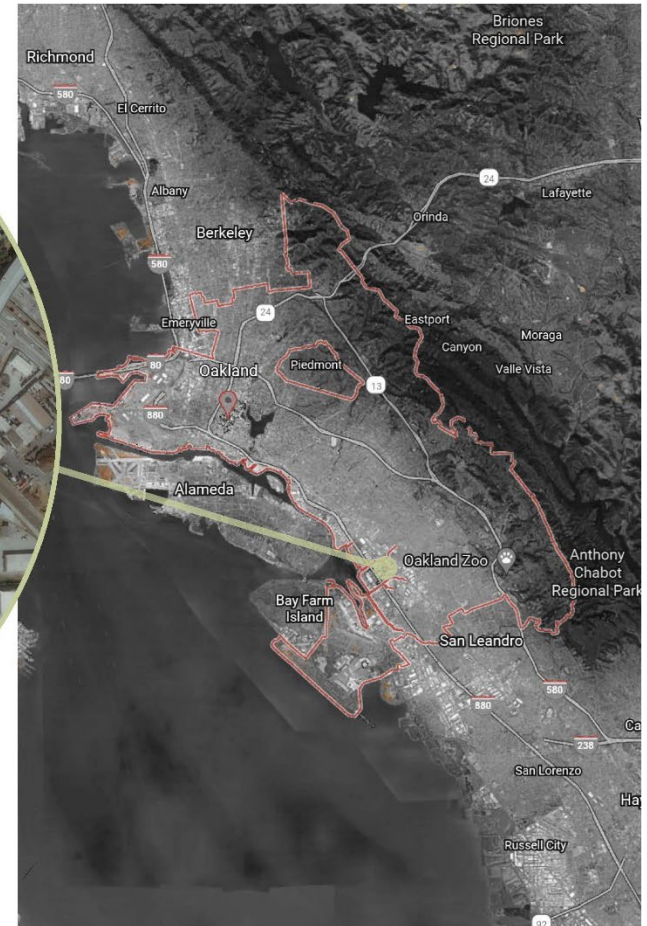
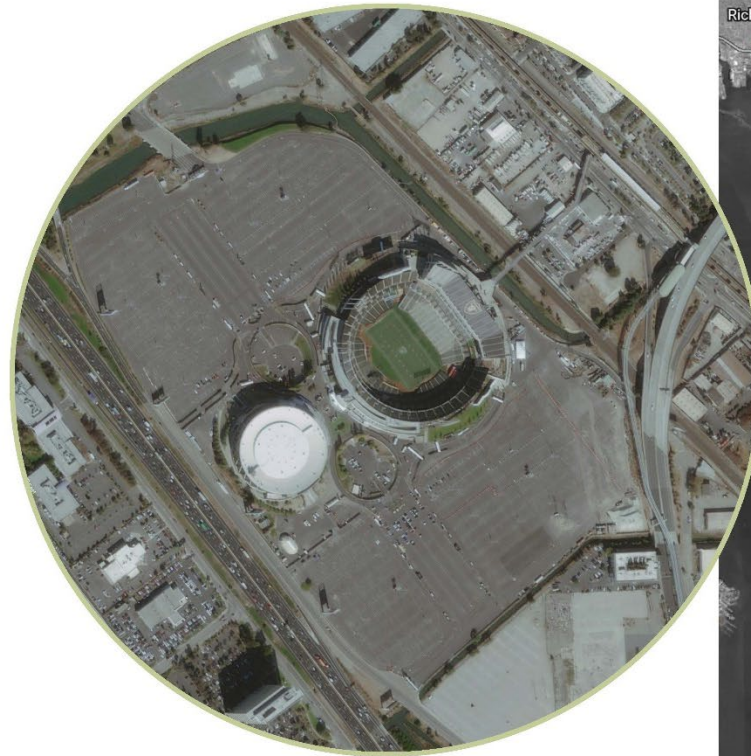


Figure 5.60 Site Selected: Oakland Coliseum

5.2 Site Analysis

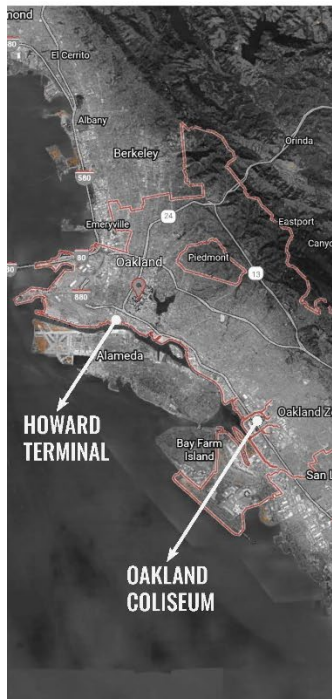


Figure 5.61 Sports Teams at the Oakland Coliseum

After going through the extensive site selection process, the researcher decided that Oakland would be the ideal city to establish a new cemetery typology in. After studying and gathering information on the city, the researcher decided to specifically select the Oakland Coliseum area as the site to design a new cemetery in (Figure 5.60). The space is currently in transition as 2 major sports teams, the Oakland Raiders (football) and the Golden State Warriors (basketball), have left the city to make their homebase in other cities (Figure 5.61). The Oakland Athletics a.k.a. Oakland A's (baseball) have remained in the city but are moving to a new stadium that could possibly be built soon at Howard Terminal (Figure 5.62). This is not just a physical circumstance that has taken place at this site. The community around this site has devoted their loyalty to these teams

and have benefited from the investment in their city. With these teams leaving Oakland comes the emotional consequences on the community of that feeling of the loss of hope for their city. Feelings of abandonment, betrayal and anger are present within the community. These sports teams lifted the spirits of the locals and gave them a sense of pride and liveliness in their neighborhood. Just like that, the community is left with an empty space full of asphalt with no benefit to them. These people have been robbed of so much value and have been left with a space that is just detrimental in terms of urban heat island effect, impervious surfaces, and loss of economic, ecological, and cultural value. This is the perfect site to give back to the community something that is theirs.

SITE ANALYSIS



(BIG, 2021)



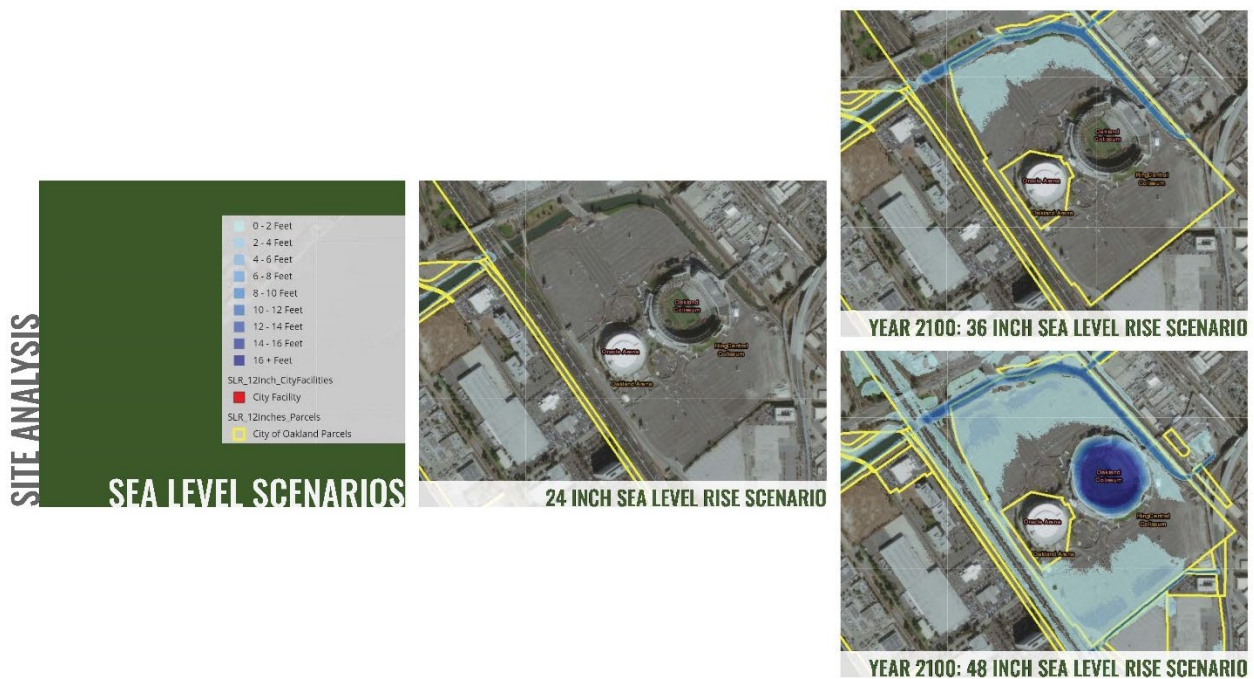
Figure 5.62 New Ballpark at Howard Terminal



(BIG, 2021)

Figure 5.63 BIG's Proposal for the Oakland Coliseum Site

Figure 5.63 shows the proposal of the firm, BIG, for the development of the old Oakland Coliseum site. After understanding the history of the site in relation to the community, the researcher decided that rather than designing the site for profit maximization and corporate development, the site would be designed to be a place of ecological and cultural value. It could become a sacred center for the people of the community and a habitat for local marsh wetland wildlife. The cemetery is a landscape that can provide both. It preserves culture and, in this case, it can mitigate sea level rise as well (Figure 5.64).



(Surging Seas Risk Finder, 2021)

Figure 5.64 Sea Level Scenarios

5.3 Conceptual Design and Site Design



THE OAKLAND SACRED

Figure 5.65 The Oakland Sacred

5.3.1 The Master Plan

The Oakland Sacred is a new cemetery typology that is transformed by the personal expressions of visitors at the grave and not designed based on the sole preferences of cemetery designers and professionals. It responds to the activities that visitors engage in and the objects they leave behind for their deceased loved ones at the grave. The form of the master plan (Figure 5.66) is a radial form inspired by the existing site plan. The site is comprised of 7 cemetery rings. The rings symbolize eternity, completion, and perfection. The number 7 represents perfection as well. In Christian numerology, 3 is the number of God, as in the Holy Trinity. 4 is the number of man/woman or of Earth, as in the 4 corners of the earth. 3 plus 4, the combination of God and Man/Woman, is 7. It is perfection. It is the connection of the soul with the Higher Being. The Oakland Sacred is a place of spirituality but of ecology as well as a marsh wetland is introduced to the city at this site.



Figure 5.66 The Oakland Sacred: Master Plan



Figure 5.67 The Oakland Sacred: The 4th Ring



Figure 5.68 The Oakland Sacred: The 4th Ring

The logo of the city of Oakland, as seen in Figure 5.67, is the inspiration behind the form of The 4th Ring at The Oakland Sacred. The cemetery form is taken from the aerial view of the city logo of an oak tree. It is not only a tribute to the tree symbol of this great field of landscape architecture, but it is a tribute to the city of Oakland and its natural history as the city used to have a widespread presence of oak trees.

5.3.2 The Community Spaces

The form also reflects good circulation that is symbolic of how everything is connected. Community spaces (Figure 5.69-5.74) are placed throughout the landscape and themed with the foundation of all things: Earth, Fire, Air, and Water. The cemetery encourages visitors to not just express themselves at the grave of their loved ones but to also express themselves at the community spaces for others around them. It is ritualizing the objects that people leave behind at the grave as was observed in this study. It encourages the act of walking to each space to leave something behind for the dead in solidarity with others. For Earth, potted plants and flowers can be placed in that space. Candles can be placed in the Fire community space. Balloons, pinwheels, flags, and other things that interact with the air can be tied to posts in the Air community space while at the Water community space, drinks can be placed to leave for the dead.

The Tree of Life grounds the whole cemetery together in the center of the site where a huge oak tree is placed. The roots represent going into the ground and connecting with the dead. As this is done, the tree, with its trunk, branches, and leaves above ground reach out to the heavens. The space around it is a place for the living located between what is underground and what is in the heavens. Here, people can

suspend things from the tree as was observed in this study. Visitors can hang chimes, bottles, notes, flowers, and many other things as they connect to the spiritual world according to their background and perspective.

COMMUNITY SPACES

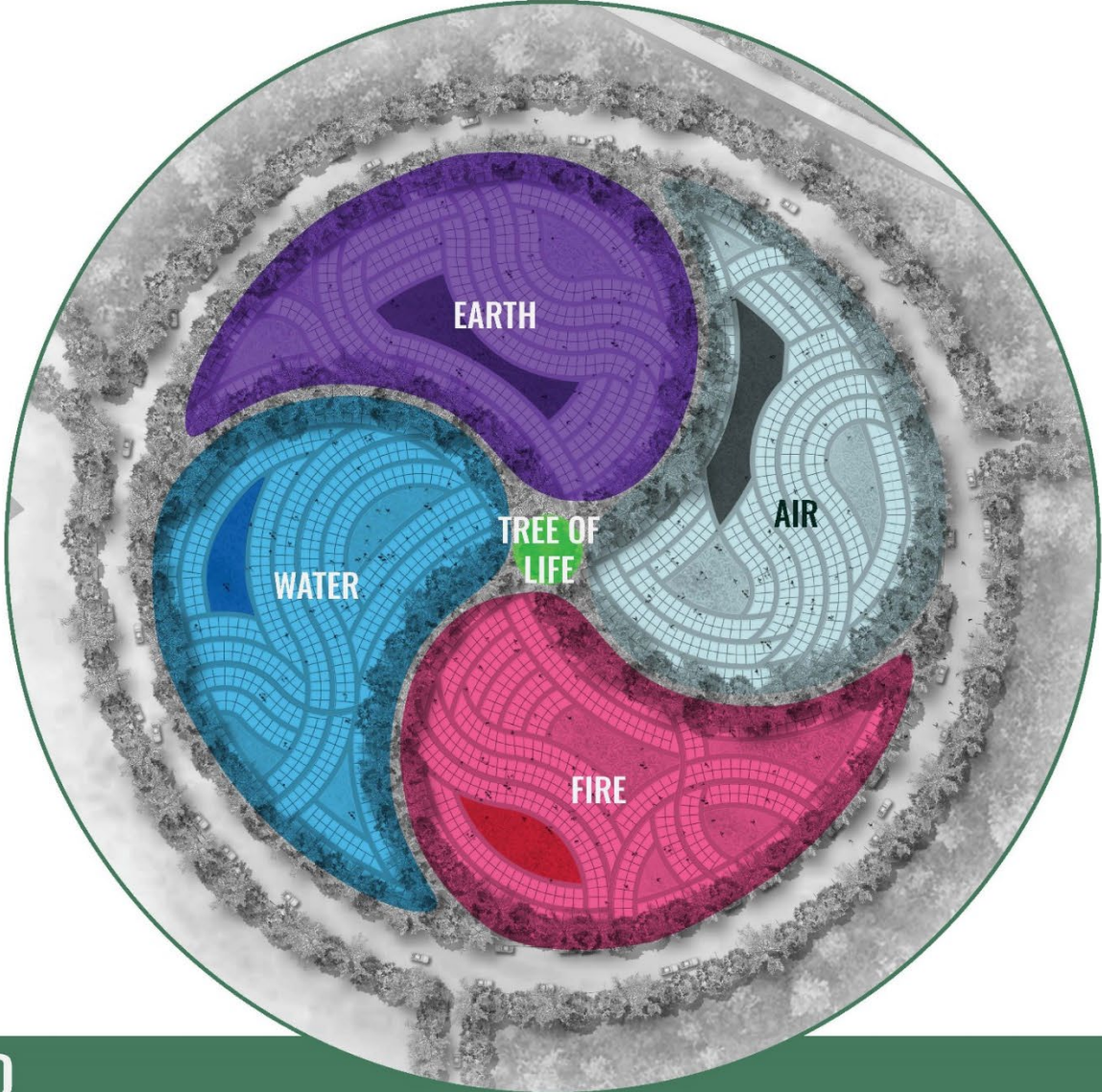


Figure 5.69 The Oakland Sacred: Community Spaces

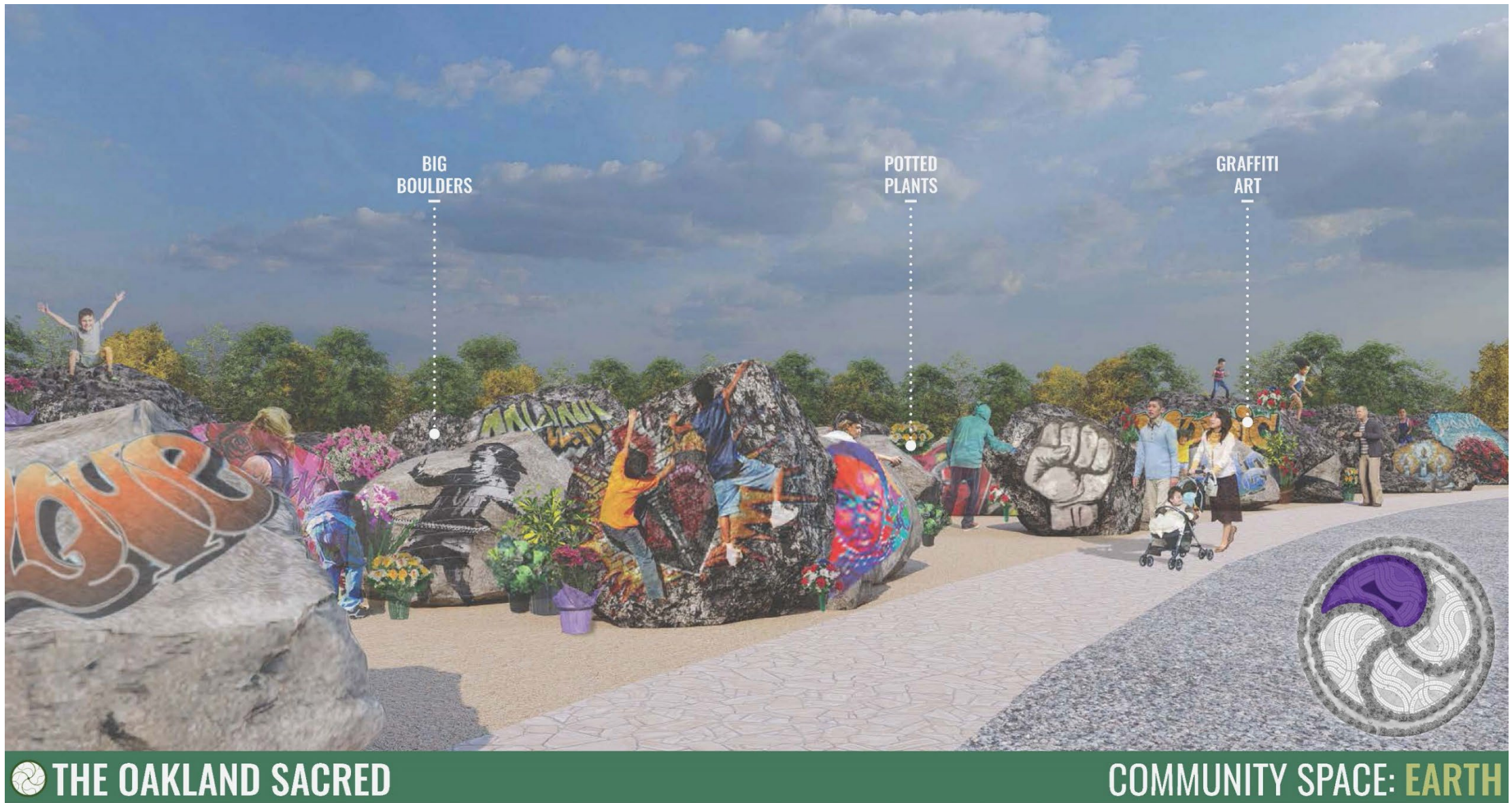
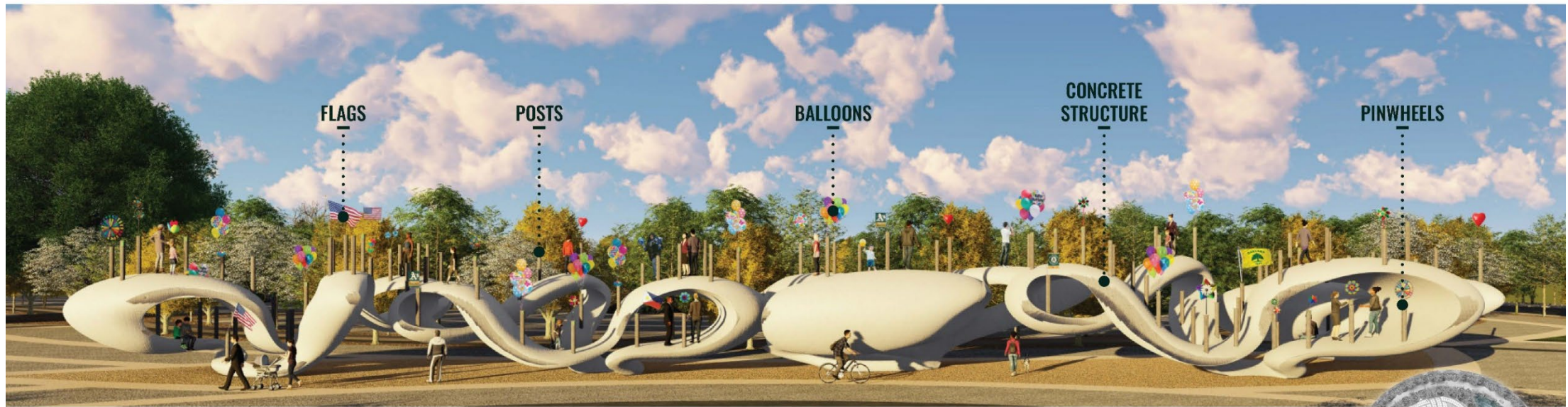


Figure 5.70 Community Space: EARTH



 **THE OAKLAND SACRED** **COMMUNITY SPACE: AIR**

Figure 5.71 Community Space: AIR



Figure 5.72 Community Space: FIRE



Figure 5.73 Community Space: WATER



Figure 5.74 Community Space: TREE OF LIFE

5.3.3 *The Cemetery Plot Designs*

In Chapter Four, the successful and unsuccessful features of cemeteries for personal expressions were derived from the data gathered as they were processed and analyzed. With that information, the researcher was able to design various examples of what a plot could look like in this new cemetery typology as seen in Figures 5.75-5.81.

The researcher made sure to take advantage of those successful features and to avoid the hindrance to personal expression that the unsuccessful features caused. Here are some features and elements that are shown in the plot design examples:

- Gravestones Designed as Personal Expressions and *for* Personal Expressions
- Vertical Elements
- Personal Maintenance
- Delineation
- Features and Elements for a Gathering Space (e.g. shade, seating, tables)
- Elimination of Rules Conflicting with Personal Expressions
- Accessibility (this is seen more in the master plan design of The 4th Ring)



Figure 5.75 Plot Design Example 1



Figure 5.76 Plot Design Example 2



Figure 5.77 Plot Design Example 3



Figure 5.78 Plot Design Example 4



Figure 5.79 Plot Design Example 5



Figure 5.80 Plot Design Example 6



Figure 5.81 Plot Design Example 7

5.4 Summary

Chapter Five presented the design process of this study. It discussed the Oakland Coliseum site and how it was selected. The significance of establishing a cemetery there was explained along with its impact on the community in the area. The final concepts and designs were then presented. It showed a new cemetery typology that is not just inspired by the personal expressions of people observed in this investigation at cemeteries but it is also a landscape that will continually transform by the personal expressions of people as they visit this new cemetery.

Chapter Six will discuss the synthesis of this entire study and what it means for the future of the field of landscape architecture as it pertains to cemetery design.

CHAPTER 6: CONCLUSION

Chapter Five presented the completion of the investigation by presenting the final output of a new cemetery typology in the City of Oakland located in the San Francisco Bay Area. The final design consists of the design features and elements determined necessary by this study for a cemetery that is transformed by the personal expressions exhibited by visitors after the day of burial.

Chapter Six revisits the research questions proposed in this study and answers them based on the data gathered, analyzed, and synthesized in this research. The study's relevance to the field of landscape architecture will then be discussed as well as the possible topics for future research.

6.1 Research Questions Revisited

The following research questions guided the investigation on designing cemeteries for personal expressions. These questions will now be answered based on the data gathered, analyzed, and synthesized in this research.

1. What are the conflicts that arise between how cemetery plots are designed and how people use them after the day of burial?

- *Lack of Delineation*

Cemeteries do not provide a clear delineation of cemetery plots when it is needed by visitors for clarity to express themselves at the grave.

- *Missing Features and Elements for a Gathering Space*

Many people use the grave as a gathering space. Cemeteries must either provide shade, seating, tables, more space or other features and elements for gathering or they should at least design cemetery plots to accommodate those things if brought in by visitors.

- *Rules Conflicting with Personal Expressions*

Cemetery rules and policies should not prohibit or hinder personal expressions of visitors. Cemeteries should instead be designed to accommodate them. The current maintenance practices that bring about these rules and policies conflict with personal expressions.

- *Inaccessibility*

Graves are not accessible to everyone, especially for the disabled. Cemeteries must be designed so that every grave is accessible by anyone.

2. What programming elements and design features can encourage the various personal expressions exhibited by cemetery visitors after the day of burial?

- *Gravestones Designed as Personal Expressions and for Personal Expressions*

People should not miss the opportunity for personal expression on the gravestone. The form and content of gravestones can be personal expression and can be designed for personal expression, like the objects that people leave at the grave.

- *Vertical Elements*

When there are vertical elements added at the grave, the variety of personal expressions increases.

- *Personal Maintenance*

When people are given more freedom for personal expression, the sense of ownership increases for maintaining, decorating, and embellishing the plot.

3. How does a well-designed cemetery that encourages freedom of personal expression after the day of burial look like?

The Design Chapter (Chapter Five) can be referred to for how a cemetery could look like in the city of Oakland. The findings of this study illustrate that adaptation of design to its local context is critical when it comes to personal expression since the cemetery design should reflect how its users utilize the space and what their preferences are. Cemeteries should not always look like the Euro-American cemetery designs seen throughout the country with its perpetually maintained lawns and evenly laid out rows of graves. The maintenance of perfect lawns can be a hindrance to the personal expression of visitors. Cemeteries should reflect and represent the personal expression of people that use the cemetery. Furthermore, the cemetery does not only have cultural value but ecological value as well. Cemeteries can bring back what is native to the ecoregion through good ecological design incorporated in.

6.2 Relevance to Landscape Architecture

This investigation has focused on cemetery design and the possibility of what it could be if it was based on the personal expressions of visitors. The findings go beyond the topic of cemeteries as one thinks about the relevance of this study to the field of

landscape architecture. This section discusses the study's contribution to the field in various ways.

6.2.1 Inclusion

The findings from this study reveal ways that help landscape architects become more inclusive in our designs. Cemetery history literature brought to light the racism that was underlying in some of the designs of cemeteries. The observation methods used in this research can be employed to combat our personal preferences or biases as designers. Data gathered can inform cemetery professionals and designers on how people use this sacred landscape enabling them to design for the user instead of solely for the owners.

Designing cemeteries that are more inclusive allows a broader range of users to have the freedom of personal expression at these sites. These are healing landscapes and when done right, landscape architects have the potential of improving the mental, emotional, and spiritual health of the users of the site.

6.2.2 Climate Change

One of the major challenges that landscape architects tackle is climate change. Drought and sea level rise are some of the issues related to climate change, especially in the Bay Area. With cemeteries serving as open space and having high permeability, the opportunity arises for landscape architects to take these landscapes and restore or preserve ecology and its systems. The majority of cemeteries that are established are covered with turf that require weekly mowing and heavy irrigation. This contributes to

carbon emissions and a high consumption of water. If cemeteries were designed based on personal expressions and the regional context, then there would be less of a need for the lawn cemetery as seen in the design output of this study and the native vegetation and ecological systems could be incorporated into these sites. The cemetery can then maximize the ecological benefits derived from this landscape that can even help mitigate the negative effects of climate change.

6.2.3 Cultural Enrichment

Many sites have been designed based on the decisions of the client and the designer. When these decisions are made based on personal preferences, the danger of exclusion arises. If this is the case, is the culture of the users of a space truly reflected in the design or is it the property owner's, client's, or designer's culture that is expressed? Do these landscapes accurately represent the culture of the people in the surrounding area? Landscape architects have the opportunity to design spaces that are community-based and give us insight on the way people live and how they use space. It is a physical contribution to our history.

6.2.4 Intangible Value

Many of our landscapes in the United States are located where they are at partly because of our land use policies. In this study, a cemetery was designed in a space that is existing for commercial land use, specifically at the Oakland Coliseum area. It is in a transitional phase as sports teams move to other locations to play, leaving this site obsolete in its use. There are proposed plans to redevelop the area for retail, housing,

educational facilities, and recreational use. The site is very accessible by freeway and public transportation and could be a prime location for these developments, however it could also be a prime location for a cemetery that may not provide the same economic benefits and financial gain for the city, but it can provide many intangible benefits that contribute to the wellness of the people and the community. A cemetery like the one proposed in this study, can provide the cultural, mental, emotional, spiritual, and ecological value and enrichment that a typical mixed-use/urban development cannot provide at the same level. It is important for landscape architects, urban planners, and other professionals involved to be able to see the possibilities of having cemeteries, memorial landscapes, social services, and other use cases of land in these prime locations as these commercial areas are usually very accessible to those who may use the site. It may not deliver the same financial value, but it is time to expand our way of thinking to see how the value of human beings can surpass that of money.

6.3 Future Research

This research achieved its purpose in determining the design features and elements necessary for a cemetery that is transformed by personal expressions of visitors. The following questions would be helpful in propelling this study forward in future research:

1.) How would a cemetery design based on the personal expressions of visitors look like in a different region of the world in a different context?

This study focused on the San Francisco Bay Area. The region is comprised of a certain racial and ethnic diversity that may not be found in many parts of the world. Additionally, the cemeteries that were visited and observed were predominantly Christian-centric cemeteries. If the same methodology was applied to a study in a different part of the world, what findings would be derived in terms of determining what design features and elements encourage and promote freedom in personal expression at the cemetery? Since this type of study is site specific, there is a plethora of design results that can be delivered from using the same methodology in various places. Some examples of design theses that can be done are looking at how the cemetery could look like in a Hindu, Native American, Chinese, African, Scandinavian, Jewish, Islamic, Buddhist, or any other type of community context if it was designed with personal expression as the basis. The cemetery design would also vary depending on the geographical context of the site adding to the surprise of what cemeteries could look like in various contexts.

2.) How could a cemetery design that is transformed by personal expressions of visitors impact a person's wellbeing when dealing with grief?

As the cemetery design is produced from data and evidence in this study, so should the results of what impact this type of design could make on a person's wellbeing as they deal with grief. Will evidence show that it can significantly improve the visitor experience at cemeteries? Will it help people in healing from the pain of

death? What would people say are the factors at this new type of cemetery that contribute to a positive or negative experience? There is significance in measuring the impact of landscape architects and the places we design on people as our work has power to make a difference even at the individual level.

3.) What would prevent or hinder a cemetery like the one proposed in this study from being built?

The benefits that can be derived from a cemetery designed like the one in this study can only provide those possible benefits if it is built. It would be helpful to determine what would prevent or hinder a cemetery like this from being built. Research would involve tasks such as investigating current policies and regulations, interviewing people of influence on what their perceptions are, and/or working with engineers to figure out the physical limitations that can be found at a site for building a cemetery. In doing so, designers can adjust accordingly to what the findings show as to work around any obstacles and make the proposed design a reality for the community.

6.4 Summary

Chapter Six concludes this master's design thesis by revisiting the research questions that guided the investigation and answered them based on the findings. The researcher then explained the relevance of this study to the field of landscape architecture. Questions for future research were also developed to help bring the proposed cemetery design closer to a built reality. May this research help in advancing the field of landscape architecture as it enriches people and communities.

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APPENDIX

Appendix A: IRB Approval Letter



8/16/2021

IRB Approval of Minimal Risk (MR) Protocol

PI: Jodwin Surio

Faculty Advisor: Diane Allen

Department: Architecture, Planning, and Public Affairs

IRB Protocol #: 2021-0743

Study Title: *Designing Cemeteries for Cultural Expression*

Effective Approval: 8/13/2021

The IRB has approved the above referenced submission in accordance with applicable regulations and/or UTA's IRB Standard Operating Procedures.

Principal Investigator and Faculty Advisor Responsibilities

All personnel conducting human subject research must comply with UTA's [IRB Standard Operating Procedures](#) and [RA-PO4, Statement of Principles and Policies Regarding Human Subjects in Research](#). Important items for PIs and Faculty Advisors are as follows:

- ****Notify [Regulatory Services](#) of proposed, new, or changing funding source****
- Fulfill research oversight responsibilities, [IV.F and IV.G](#).
- Obtain approval prior to initiating changes in research or personnel, [IX.B](#).
- Report Serious Adverse Events (SAEs) and Unanticipated Problems (UPs), [IX.C](#).
- Fulfill Continuing Review requirements, if applicable, [IX.A](#).
- Protect human subject data ([XV.](#)) and maintain records ([XXI.C.](#)).
- Maintain [HSP](#) (3 years), [GCP](#) (3 years), and [RCR](#) (4 years) training as applicable.

REGULATORY SERVICES

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Appendix B: Interview Questions

- **Cemetery Managers/Operators**

1. What are some of the objectives of this cemetery's design?
2. Who are the different stakeholders you consider when designing the cemetery and how do you design for them?
3. (Post-burial day) What are some rituals/practices/traditions of visitors have you had to decide on whether to allow them or not?
4. (Post-burial day) How do you feel about these rituals/practices/traditions? Would you describe them as expressions of culture?
5. (Post-burial day) What are some issues/conflicts that arise with how people use the cemetery?
6. (Post-burial day) What would you say encourages cultural expression in the cemetery?
7. (Post-burial day) What changes or improvements would you make in this cemetery to accommodate more freedom in cultural expression?
8. What is your definition of a well-designed cemetery?

- **Cemetery Landscape Architects/Designers**

1. Can you explain your design process for cemeteries?
2. Who would you say your clients are? Who do you design for?
3. (Post-burial day) Are there rituals/practices/traditions of visitors that you consider when you design the cemetery or cemetery plot?
4. (Post-burial day) How do you feel about these rituals/practices/traditions? Would you describe them as expressions of culture?
5. (Post-burial day) What are some issues/conflicts that arise with how people use the cemetery?
6. (Post-burial day) What encourages cultural expression when users visit?
7. (Post-burial day) How would you redesign cemeteries or cemetery plots to be able to accommodate more freedom in cultural expression?
8. What is your definition of a well-designed cemetery?

- **Cemetery Maintenance Professionals**

1. (Post-burial day) What are some issues/conflicts that arise with how people use the cemetery?
2. (Post-burial day) How do you feel about rituals/practices/traditions that cause conflict with maintenance? Would you describe them as expressions of culture?
3. What do you think could be done to resolve these issues/conflicts?
4. If you could redesign the cemetery for easier maintenance, what would you change or improve upon?
5. What is your definition of a well-designed cemetery from a maintenance perspective?

- **Cemetery Visitors/Users**

1. Describe some of the cultural practices/traditions/rituals you have.
2. What aspects of the cemetery make you feel welcome to express your cultural practices/traditions/rituals?
3. Do you have cultural practices/traditions/rituals you feel you are not able to express at the cemetery and why?
4. What changes or improvements would you want in the cemetery or the cemetery plot to give you more freedom for cultural expression?

Appendix C: Subject Recruitment Process

The following steps show the researcher's standard procedures for recruiting subjects for the interview process. Standard scripts (Appendix C) will be followed to initialize conversations with the potential interviewees.

1. Once cemetery case study sites have been selected, researcher will begin to contact the said professionals to set up interviews. This will be done by reviewing the cemetery's website and looking for contact information.
2. Researcher will call the contact number and will ask to be referred to a cemetery manager/operator.
3. Once the researcher gets in touch with the cemetery manager/operator, an appointment for an interview will be set.
4. After the interview has been conducted, the researcher will ask the cemetery manager/operator if he/she could refer them to a cemetery landscape architect/designer and a cemetery maintenance professional. Researcher will also ask for written permission to informally approach and interview cemetery visitors.
 - a. Cemetery Landscape Architect/Designer: Researcher will then contact the cemetery landscape architect/designer and try to set up an appointment for an interview
 - b. Cemetery Maintenance Professional: Researcher will then contact the cemetery maintenance professional and try to set up an appointment for an interview
 - c. Cemetery Visitors/Users: Once written permission has been obtained and approved by the IRB, researcher will go to the cemetery and informally interview visitors if they agree to being interviewed.

Appendix D: Recruitment Scripts

For Recruiting Cemetery Managers/Operators

1. Initial Contact: Admin/Reception

Hi! My name is Jodwin. I'm a landscape architecture grad student at The University of Texas at Arlington. I'm currently working on my thesis on cemetery design and I wanted to learn about how to design for the cultural expressions of people when they visit a grave after the day of burial. Is there any manager or operator that you could put me in touch with? I'm wondering if I could set an appointment for a possible interview with someone who is involved in cemetery design or operations over there? I'll be asking questions about what makes a cemetery well-designed.

2. Possible Interviewee: Cemetery Manager/Operator

Hi! My name is Jodwin. I'm a landscape architecture grad student at The University of Texas at Arlington. I'm currently working on my thesis on cemetery design and I wanted to learn about how to design for the cultural expressions of people when they visit a grave after the day of burial. I was just wondering if I could set an appointment with you for a possible interview either via Zoom or in person (if between the ages of 18-65) or via Zoom (if age of interviewee is above 65)? I'll be asking questions about what makes a cemetery well-designed and I'd love to hear your perspective.

For Recruiting the Other Categories of Interviewees

1. Cemetery Manager/Operator

Thank you for allowing me this opportunity to interview you. There are a few other categories of people that I'd like to interview. Would you be able to refer me or get me connected to a cemetery landscape architect/designer that has been involved in cemetery design and a cemetery maintenance professional as well? I would love to interview them and get their perspectives on a well-designed cemetery too.

I would also love to get the perspective of visitors. I'd like to ask for your permission to approach visitors and informally interview them for a few minutes. You could expect sensitivity and tact from me during these intimate moments. If this is possible, could I request written permission from you? If not, I will not be interviewing any visitors from this site.

2. Possible Interviewees

a. Cemetery Landscape Designers/Architects

** Same as script for setting up an interview with cemetery manager/operator*

b. Cemetery Maintenance Professionals

** Same as script for setting up an interview with cemetery manager/operator*

c. Cemetery Visitors/Users

Hello! Good [time of day]. How's it going? My name is Jodwin. I'm a landscape architecture grad student at The University of Texas at Arlington. I'm currently working on my thesis on cemetery design and I wanted to learn about how to design for the cultural expressions of people when they visit a grave after the day of burial. I was wondering if I could just ask you a few questions on your thoughts on cemetery design either now or later? It would just be around 10-15 minutes.

Appendix E: Informed Consent for Minimal Risk Studies with Adults

- Informed Consent for Managers/Cemetery Operators



The University of Texas at Arlington (UTA) Informed Consent for Minimal Risk Studies with Adults

My name is Jodwin Surio, and I am asking you to participate in a UT Arlington research study titled, “Designing Cemeteries for Cultural Expression.” This research study is about discovering how to design cemeteries that encourages and promotes cultural expressions when people come to visit someone’s grave after the day of burial. You can choose to participate in this research study if you are at least 18 years old and you are a cemetery manager or operator that is somehow involved in design, policy, or maintenance decisions.

Reasons why you might want to participate in this study include to share your opinions and experiences and to contribute to research that could give deeper insight into the cemetery experience, but you might not want to participate if you are not able to commit to an interview session that can last up to an hour. Your decision about whether to participate is entirely up to you. If you decide not to be in the study, there won’t be any punishment or penalty; whatever your choice, there will be no impact on any benefits or services that you would normally receive. Even if you choose to begin the study, you can also change your mind and quit at any time without any consequences.

If you decide to participate in this research study, the list of activities that I will ask you to complete for the research are answering questions in an interview session. It should take about an hour of your time in one interview session. Although you probably won’t experience any personal benefits from participating, the study activities are not expected to pose any additional risks beyond those that you would normally experience in your regular everyday life or during routine medical / psychological visits.

You will not be paid for completing this study.

The research team is committed to protecting your rights and privacy as a research subject. We may publish or present the results, but your name will not be used in publication. All identifiable information will be coded. The key that includes all data with identifiable information will be stored in Microsoft Office 365 OneDrive where only authorized research personnel, UTA and the IRB will have access to. I may ask to take photos and videos of you of which you may decline. If you do permit me to take photos and videos of you, these files will only be shared in presentation form to document the research process and experience. While absolute confidentiality cannot be guaranteed, the research team will make every effort to protect the confidentiality of your records as described here and to the extent permitted by law. If you have questions about the study, you can contact me at (310) 871-2265 or at jodwin.surio@gmail.com. For questions about your rights or to report complaints, contact the UTA Research Office at 817-272-3723 or regulatoryservices@uta.edu.

You are indicating your voluntary agreement to participate by beginning this interview.

- Informed Consent for Cemetery Designers



The University of Texas at Arlington (UTA)
Informed Consent for Minimal Risk Studies with Adults

My name is Jodwin Surio, and I am asking you to participate in a UT Arlington research study titled, “Designing Cemeteries for Cultural Expression.” This research study is about discovering how to design cemeteries that encourages and promotes cultural expressions when people come to visit someone’s grave after the day of burial. You can choose to participate in this research study if you are at least 18 years old and you are a landscape architect or designer that has been involved in the design and development of a cemetery.

Reasons why you might want to participate in this study include to share your opinions and experiences and to contribute to research that could give deeper insight into the cemetery experience, but you might not want to participate if you are not able to commit to an interview session that can last up to an hour. Your decision about whether to participate is entirely up to you. If you decide not to be in the study, there won’t be any punishment or penalty; whatever your choice, there will be no impact on any benefits or services that you would normally receive. Even if you choose to begin the study, you can also change your mind and quit at any time without any consequences.

If you decide to participate in this research study, the list of activities that I will ask you to complete for the research are answering questions in an interview session. It should take about an hour of your time in one interview session. Although you probably won’t experience any personal benefits from participating, the study activities are not expected to pose any additional risks beyond those that you would normally experience in your regular everyday life or during routine medical / psychological visits.

You will not be paid for completing this study.

The research team is committed to protecting your rights and privacy as a research subject. We may publish or present the results, but your name will not be used in publication. All identifiable information will be coded. The key that includes all data with identifiable information will be stored in Microsoft Office 365 OneDrive where only authorized research personnel, UTA and the IRB will have access to. I may ask to take photos and videos of you of which you may decline. If you do permit me to take photos and videos of you, these files will only be shared in presentation form to document the research process and experience. While absolute confidentiality cannot be guaranteed, the research team will make every effort to protect the confidentiality of your records as described here and to the extent permitted by law. If you have questions about the study, you can contact me at (310) 871-2265 or at jodwin.surio@gmail.com. For questions about your rights or to report complaints, contact the UTA Research Office at 817-272-3723 or regulatoryservices@uta.edu.

You are indicating your voluntary agreement to participate by beginning this interview.

- Informed Consent for Cemetery Maintenance Professionals



The University of Texas at Arlington (UTA)
Informed Consent for Minimal Risk Studies with Adults

My name is Jodwin Surio, and I am asking you to participate in a UT Arlington research study titled, “Designing Cemeteries for Cultural Expression.” This research study is about discovering how to design cemeteries that encourages and promotes cultural expressions when people come to visit someone’s grave after the day of burial. You can choose to participate in this research study if you are at least 18 years old and you are a maintenance professional that is involved in the maintenance operations in the cemetery.

Reasons why you might want to participate in this study include to share your opinions and experiences and to contribute to research that could give deeper insight into the cemetery experience, but you might not want to participate if you are not able to commit to an interview session that can last up to an hour. Your decision about whether to participate is entirely up to you. If you decide not to be in the study, there won’t be any punishment or penalty; whatever your choice, there will be no impact on any benefits or services that you would normally receive. Even if you choose to begin the study, you can also change your mind and quit at any time without any consequences.

If you decide to participate in this research study, the list of activities that I will ask you to complete for the research are answering questions in an interview session. It should take about an hour of your time in one interview session. Although you probably won’t experience any personal benefits from participating, the study activities are not expected to pose any additional risks beyond those that you would normally experience in your regular everyday life or during routine medical / psychological visits.

You will not be paid for completing this study.

The research team is committed to protecting your rights and privacy as a research subject. We may publish or present the results, but your name will not be used in publication. All identifiable information will be coded. The key that includes all data with identifiable information will be stored in Microsoft Office 365 OneDrive where only authorized research personnel, UTA and the IRB will have access to. I may ask to take photos and videos of you of which you may decline. If you do permit me to take photos and videos of you, these files will only be shared in presentation form to document the research process and experience. While absolute confidentiality cannot be guaranteed, the research team will make every effort to protect the confidentiality of your records as described here and to the extent permitted by law. If you have questions about the study, you can contact me at (310) 871-2265 or at jodwin.surio@gmail.com. For questions about your rights or to report complaints, contact the UTA Research Office at 817-272-3723 or regulatoryservices@uta.edu.

You are indicating your voluntary agreement to participate by beginning this interview.

- Informed Consent for Cemetery Visitors



The University of Texas at Arlington (UTA)
Informed Consent for Minimal Risk Studies with Adults

My name is Jodwin Surio, and I am asking you to participate in a UT Arlington research study titled, “Designing Cemeteries for Cultural Expression.” This research study is about discovering how to design cemeteries that encourages and promotes cultural expressions when people come to visit someone’s grave after the day of burial. You can choose to participate in this research study if you are at least 18 years old and you are a visitor in the cemetery.

Reasons why you might want to participate in this study include to share your opinions and experiences and to contribute to research that could give deeper insight into the cemetery experience, but you might not want to participate if you are not able to commit to an interview session that can last up to 15 minutes or if you are in a heightened or sensitive emotional state. Your decision about whether to participate is entirely up to you. If you decide not to be in the study, there won’t be any punishment or penalty; whatever your choice, there will be no impact on any benefits or services that you would normally receive. Even if you choose to begin the study, you can also change your mind and quit at any time without any consequences.

If you decide to participate in this research study, the list of activities that I will ask you to complete for the research are answering questions in an interview session. It should take about 15 minutes of your time in one interview session. Although you probably won’t experience any personal benefits from participating, the study activities are not expected to pose any additional risks beyond those that you would normally experience in your regular everyday life or during routine medical / psychological visits.

You will not be paid for completing this study.

The research team is committed to protecting your rights and privacy as a research subject. We may publish or present the results, but your responses will be anonymous and unidentifiable. I may ask to take photos and videos of you of which you may decline. If you do permit me to take photos and videos of you, these files will only be shared in presentation form to document the research process and experience. While absolute confidentiality cannot be guaranteed, the research team will make every effort to protect the confidentiality of your records as described here and to the extent permitted by law. If you have questions about the study, you can contact me at (310) 871-2265 or at jodwin.surio@gmail.com. For questions about your rights or to report complaints, contact the UTA Research Office at 817-272-3723 or regulatoryservices@uta.edu.

You are indicating your voluntary agreement to participate by beginning this interview.

Appendix F: Confidentiality and Data Security

To help protect confidentiality of interviewees in the cases where identifiable data is collected, a 6-digit code will be used for publication and presentation purposes in the following manner:

- 1st 2 Digits: Case Study Site Number

- 2nd 2 Digits:
 - MO: Manager/Operator
 - LA: Landscape Architect/Designer
 - MP: Maintenance Professional
 - VI: Visitor

- 3rd 2 Digits: Interviewee Number

Here are a few examples of the coding system for a few interviewees hypothetically at

Case Study Site #1:

- 01MO01: Case Study Site 1 – Manager/Operator – Interviewee 1
- 01LA01: Case Study Site 1 – Landscape Architect/Designer – Interviewee 1
- 01MP01: Case Study Site 1 – Maintenance Professional – Interviewee 1
- 01VI01: Case Study Site 1 – Visitor – Interviewee 1
- 01VI02: Case Study Site 1 – Visitor – Interviewee 2
- 01VI03: Case Study Site 1 – Visitor – Interviewee 3

Data will be collected using the following tools:

- Electronic
 - Researcher's iPhone for voice recording during in-person interviews
 - Researcher's Zoom account to record virtual interviews
 - Researcher's iPhone for taking photos and videos

- Paper
 - Ethnograms for recording observations
 - Interview Questionnaires for writing down notes on interviewees' responses

All electronic data will be uploaded to UTA's O365 OneDrive through researcher's account. All paper documents with recorded data will be scanned in and uploaded to UTA's O365 OneDrive as well. The Principal Investigator will be responsible for the

disposition of paper and electronic files after all files have been uploaded to OneDrive. All identifiable data will only be accessible by authorized research personnel, UTA and the IRB. These security measures and precautions will be communicated to interviewees during informed consent.

The identifiable data collected from each category of interviewee are listed below:

- a. Cemetery Managers/Operators**
 - Cemetery Name
 - Interviewee Name
 - Title/Position

- b. Cemetery Landscape Architects/Designers**
 - Cemetery Name
 - Interviewee Name
 - Title/Position

- c. Cemetery Maintenance Professionals**
 - Cemetery Name
 - Interviewee Name
 - Title/Position

Data collected from interviews with cemetery visitors will be anonymous as only the following data will be recorded:

- Cemetery Name
- Gender
- Ethnicity
- Age Group
- Religion