THE RECONSIDERED CEMETERY: AN ARCHITECTURAL SEAM

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To L.B.B., M.A.B., and J.L.H., who have shown me the presence of friendship beyond death.
And to my Granny, who will not fear it for a single moment.
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I first want to thank my parents and family, who have instilled in me the beauty of smallness and value of returning. This has impacted me as a person and a designer, and I am increasingly encouraged by them every single day. I also want to thank the professors who have inspired me over the years, specifically Professor Gundersen, Professor Hofer, and Professor Bitz. They have significantly influenced my design, my teaching, and my architectural comprehension. I would also like to thank those who indulged my fascination for the cemetery: my students for their constant enthusiasm, those who spoke with me about death, and those who walked the cemeteries alongside me.
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Funerary architecture has historically held a strong role in human civilization, serving as both a cross-cultural ritual and pretext for architectural advancement. In recent Western tradition, however, it has fallen to the background of both cultural awareness and human ritual. Society’s dead are now placed in the “left-over” space of developed spatial fabric, with little reconsideration of their execution in light of contemporary architectural advancements or changing sense of place.

This thesis proposes that architecture is not only inherently present within the cemetery (a necessary component of the human culture0 but that funerary architecture can and should be re-injected into contemporary society. This investigation will (1) address the nature of the cemetery within a historic and cultural context and (2) test its architectural potential within a design curriculum. In regards to the spatial relationships between the living and dead, I will propose a set of spatial topoi that may reach to the nature of the seam between worlds. Architectural design proposals for the “reconsidered cemetery” will be developed by a group of Design 4 students who are completing their second year of design curriculum. The program of the cemetery will be introduced into the “desert project,” which will not only address the relationship between the living and dead (a program specific relationship) but the relationship
between the living and the environment of the desert (a site specific consideration). This thesis not only tests the impact of the cemetery within an architectural design, but challenges the pedagogical incorporation of theoretical and architectural thinkers in order to shape and execute a design project.
CHAPTER 1
INTRODUCTION

Cemetery as Architecture

If we find a mound in a forest, six feet long and three feet wide, heaped up with a spade in the shape of a pyramid then we become solemn and something tells us: somebody lies buried here.—This is architecture! -Adolf Loos

From the pyramids of the ancients to the recent intrigue of the ‘natural burial,’ processes of caring for the dead have varied greatly throughout time. It is an inherently human program, saturated with memory and historically executed through a wide range of articulations. Funerary rites have been rooted in civilizations for millennia, yet the unfortunate reality is that contemporary Western culture often disregards significance of this human ritual. Instead, many cemeteries have emerged from the haphazard and often arbitrary placement of bodies, retaining only faint evidence of generational development or cardinal directionality. Does this suggest that the cemetery should be left to the whims of the chance? Civilizations will inevitably establish a general place and strategy through which to bury their dead, but ought the architectural discipline ignore the potentialities that the cemetery affords? Shall it omit this final housing of a body on the earth? The living naturally remember their dead, honor their dead, and join their dead. It is thus only appropriate for the architecture discipline to acknowledge this significance, to redefine role of the cemetery in the articulated consciousness.

This thesis proposes that architecture is not only inherently present within the cemetery- a necessary component of the human culture- but that funerary architecture can and should be re-injected into contemporary society. This investigation will (1) address the nature of the cemetery within a historic and cultural context and (2) test its architectural potential within a design

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curriculum. I propose to take what David Leatherbarrow calls the “counter-postulate position”.\(^2\) This position, he explained, is captured within the statue of a goddess, figure moving ever-forward, eyes directed subtly behind. This glance behind does not reveal her wish to retreat or remain within the familiar past; it is not evidence of her nostalgia. Rather, she seeks historical guidance in making steps toward her future; she maintains an awareness of the place from which she came, but nevertheless moves forward. Through assuming this position, we may identify the commonalities that seam cultures and span millennia, the historical evidence that may articulate fundamental needs. From this knowledge, we may step toward an architecture that can capture the significance and subtleties of the cemetery, redefine architecture’s potential in housing the dead.

**Cemetery as Dwelling**

The house man lives in is temporary, since the real one, to the construction of which he dedicates his whole life, is his final resting place. -Herodotus\(^3\) The truth in this statement lies in an undeniable juxtaposition: the temporality of life and the permanence of death. Death is a threshold through which all humans enter, the point of leaving the familiar living world. Because the condition beyond death is unknown, it is grasped through various religious faiths; spirituality answers death’s uncertainties. Giambattista Vico’s names the human response to these, spirituality and death, among the three basic human conditions: religion, matrimony, and burial:

…the human experience of death as the core of a universal language or code. Through the rituals and symbols that constitute this language people cope with the threat of death. The performance of death-related rituals is an attempt to mediate the opposition between life

\(^2\) David Leatherbarrow, ""Architecture Oriented Otherwise"," University of Florida Lecture Series (Gainesville, 2008).

\(^3\) Quoted on p. 28 of Monica Gili, *La Ultima Casa: The Last House* (Barcelona: Ingoprint, SA, 1999).
and death by asserting that death is an integral part of life. Death, in fact, provides an opportunity to affirm the continuity of life itself.⁴

Life is comprehended only in its opposition to death. Therefore, the coexistence of the two within a single place distinguishes the realities of each, a condition that connects all cultures within the human species.

Historically, the tomb assured the priority of the dwelling. The ancient house was regarded as a somewhat temporary porch or annex to the tomb, a threshold between the public civilization and private ancestry. In this, the dwelling for the living was directly tied to the dwelling for the dead.⁵ While this regard has been altered and reconsidered countless times, the closeness of a civilization with its progenitors typically retained regional proximity. It even remains customary within the current Chinese culture to maintain shrines for ancestry within the home, in order that the living might worship, provide offerings, and dwell alongside their dead. This is no longer the case in Western culture. Instead, we now find a globalized society that fears, ignores, or minimizes the impact of the cemetery within a place. In the international and inter-cultural context, it is nearly impossible for a single cemetery to provide a collective place for the dead, as there remain so few alignments in the collective view of death itself. This leads to a crucial question for today’s Western cultures: is the lack of attention for the cemetery evidence of a pre-occupation with life, a step away from spiritual grounding, or as Pedro Azara maintains, based on “a sense of decency, since death always disturbs and is not a subject for


Does the incorporation of so many cultures into a single place lead to a weakening of the death ritual, or simply the loss of a traditional sense of place?

The program of the cemetery itself provides the living a mysterious, constant, and essential component. As a fact of existence, all civilizations were created by civilizations before. The intrigue of the cemetery lies in the fact that it provides clues to our ancestry, our sole avenue for being. Robert Pogue Harrison stated:

The awareness of death that defines human nature is inseparable from indeed, it arises from our awareness that we are not self-authored, that we follow in the footsteps of the dead. Everywhere one looks across the spectrum of human cultures one finds the foundational authority of the predecessor. Nonhuman species obey only the law of vitality, but humanity in its distinctive features is through and through necrocratic. Whether we are conscious of it or not we do the will of the ancestors: our commandments come to us from their realm; their precedents are our law; we submit to their dictates, even when we rebel against them…Only the dead can grant us legitimacy…Like human dwelling, the afterlife needs places to take place in. If humans dwell, the dead, as it were, indwell- and very often in the same space.  

Recognizing the significance of this relationship affords humanity’s ability to gain historic legitimacy and establish present place. It lies inherent in the universal fascination with death and religious beliefs that qualify the hereafter. Why, then, the silent hesitation in dealing with today’s dead? Why shy from integrating the living and dead, as ancient civilizations did so long ago?

The condition of the living coexisting with- and gaining legitimacy from- its dead further supports Vico’s inclusion of burial within the basic human institutions:

Thus by the graves of their buried dead the giants showed dominion over their lands, and Roman law called for burial of the dead in a proper place to make it religious. With truth

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they could pronounce these heroic phrases: we are the sons of the earth, we are born from these oaks.  

People retain the wealth and the culture of those who came before them through generational exchange. So while physical ownership may be shared between lifetimes, only human memory bridges the void between them, affording simultaneous presence. Therefore, memory offers an emotional coexistence, death offers physical coexistence, and the cemetery affords multigenerational dwelling within a fixed place.

The following step in the investigation addresses the typological distinctions through the study of precedents. Through these, I pose the fundamental questions: how do the living dwell alongside their dead? What are the consistencies and distinctions between various funerary spaces and rituals? How are the dead marked, honored, and remembered? The following precedents constitute the counter-postulate’s glance behind.

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CHAPTER 2
SPATIAL TOPOI AND PRECEDENTS

Identifying the various typologies of the cemetery will provide a framework through which
to focus the pedagogical investigation. Reducing each condition to the root of its fundamental
situation will allow for the identification of precedents that may address the entire spectrum of
the cemetery. The underlying spatial themes behind these conditions, which I shall call the
spatial topoi, are supra-incidental conditions that link and distinguish the various types of
funerary architecture. For these, I use the term topos- “a traditional theme or formula in
literature”\(^1\) - to describe each typological conditions. A spatial topos thus identifies a
quintessential spatial theme that underlies many cemetery organizations.

I shall attempt to define these topoi within this spectrum of spatial situations, through (1)
the situating of *dead to ground*, exemplified through a cemetery precedent of recent design and
(2) the relationship of *dead to living*, architecturally re-presented through a memorial. While I
may supplement the argument further by looking at more historic or even archaic examples of
burial, looking specifically at examples that have been designed or extended within the past
century will place the discussion within a contemporary scope. Indeed, ancient burials provide
the foundation for current funerary practices, but this thesis addresses the future of funerary
architecture. Therefore, looking specifically at recent examples will establish a trajectory for
programmatic reconsideration. The following categories establish the typological framework for
initiating cemetery design. To identify the summation of all methods, Ken Worpole stated:

There are three ways in which you can dispose of your loved ones and fellow citizens: burn
them, bury them or build them a place of their own.\(^2\)

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The first set of spatial topoi, *dead to ground*, located in the top row of Figure 2-1, directly relates to the application of these three methods: the constructed cemetery (built), the cemetery plane (buried), the urban cemetery (built and buried), and the invisible cemetery (burned and/or forgotten). These four constitute the specific relationships of the *dead to ground* within overall cemetery organization, each with varying implications of density, experience, and proximity to the living.

Through this spatial situation, we recognize the ability to see, touch, and step across the burial ground, the dead held with various associations to the human body, but we must ask how this impacts the experience between the living and dead. How do the living and dead dwell together? What is different about visiting and honoring a grave that is placed at eye level and one that you look down upon? The second set of topoi, the *dead to living*, located in the bottom row of Figure 2-1, seeks to answer these questions. While these topoi are suggested within the first, the richness of human ritual lays within the relationship between the living and dead. Not only must we identify the impacts of various experiential situations, we must find ways of designing funerary architecture that further enriches this. It is for this set- the architectural translation of *dead to living* topoi- that I propose memorial precedents, for through the abstraction and cultural impact of the memorial, architects have begun to capture the phenomena between the two worlds.

**The Relationships Defined**

The discussion will begin by defining the two primary relationships that will be addressed through both the precedent studies and the pedagogical execution. The relationship between the dead and the surrounding world must be addressed in a dual manner, considering both its spatial context of place and emotional threshold of conscience. The following categories, *dead to ground* and *dead to living*, respectively address these notions. In categorizing the spatial topoi, I
have identified a constant and a variable through which to qualify the distinctions. In this first set, *dead to ground*, ground is the constant.

**Dead to Ground**

It is the foundation upon which we dwell, the provider of food, the decomposer of bodies; it seams the living world and the underworld at a surface, and simultaneously acts as a boundary and a threshold. As such, it is only appropriate that it provides the mediating constant between the living and the dead.

There has always been a powerful relationship between the dead and ground, for the earth acts as the primary separating- or integrating- element between of the living and the dead. Italo Calvino describes the connectivity of the two worlds in his book, “Invisible Cities”:

They say that this has not just now begun to happen: actually it was the dead who built the upper Eusapia, in the image of their city. They say that in the twin cities there is no longer any way of knowing who is alive and who is dead.

The question that arises from this passage is, do the living construct the cemetery for the dead, or did the dead construct the city for the living? The interdependency between the living city and the dead city lies in this condition- humans build upon those who gave them life. Therefore, each world remains reliant on the other, though they remain extraordinary inversions.

Not only does the earth provide a physical mediator, it negotiates the human perception of the dead. Above ground we find mausoleums, columbaria, and sepulchers, below are graveyards, catacombs, and crypts. The juxtaposition of the two demonstrates the contrast of perception. A mausoleum is exposed within the world of the living, the scale of the body is evident, visible within the world of the living. We understand it as an object within a landscape, an architecture that monumentalizes the placement of the dead. In the graveyard, however, the

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coffin is hidden from the living; we sense the scale and placement of the dead only through markers that break the surface of the earth, into our own world. Removing the markers would obscure the cemetery’s presence, a concealment that is increasingly exaggerated in catacombs and crypts. In these, the dead are completely hidden from living, visible only to those who break the ground plane and travel into the territory of the dead. Burials of the underworld thus remain the subject of mystery and lore, while those above are more revealed and comprehensible.

To address the nature of the underworld from a different perspective, Calvino continues his “Cities and the Dead” with the description of another cemetery, Argia. His portrays Argia as an inverted spatial condition, how the dead experience it from below:

What makes Argia different from other cities is that it has earth instead of air. The streets are completely filled with dirt, clay packs the rooms to ceiling, on every stair another stairway is set in negative, over the roofs of the houses hang layers of rocky terrain like skies with clouds. We do not know if the inhabitants can move about the city, widening the worm tunnels and the crevices where roots twist: the dampness destroys people’s bodies and they have scant strength; everyone is better off remaining still, prone; anyway, it is dark. From up here, nothing of Argia can be seen; some say, “It’s better below there,” and we can only believe them. The place is deserted. At night, putting your ear to the ground, you can sometimes hear a door slam.⁴

In *dead to ground*, the situating of the dead in relation to the surface of ground will be presented within its four quintessential spatial topoi, identified in Figure 2-2. The cemetery precedents will address these situations in their absolute forms, suggest spatial and architectural implications, and ultimately pose the fundamental question: how do the dead dwell above, between, and below the ground plane, the foundational surface for the living world?

**Living to Dead**

Redefining funerary architecture must begin with reconsidering the human instinct to bury and honor their dead. The new cemetery must satisfy an array of issues, from physical body

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⁴ Ibid.
decay to society’s awareness and embrace of death. It must address the fundamental relationship of the body to the earth, dead to ground, but also account for another essential relationship- dead to living. How is human ritual impacted by dwelling above, beside, or among the dead? How are components within the cemetery indicative of living occupation? How are the dead presenced within the cemetery? These questions establish a set of issues that must imbue funerary design, for they challenge the nature of physical and emotional space between the living and dead.

This set of topoi (Figure 2-3) directly results from the dead to ground, but focused the investigation specifically on the ritual of human experience, not the physical spatial situation. In these, I will specifically tie these relationships into contemporary memorial designs. Presenting memorial precedents to exemplify these topoi have a precise intention: memorials constitute an architecturally invested design typology that addresses fundamental issues within the cemetery. They express narratives through the convictions of phenomenological space and use human experience to redefine a historic event. While cemeteries allow for the presencing of the individual through literal placement of the dead, memorials allow for the presencing of a collective body through the impact of architectural decisions. In the words of Marita Sturken:

A memorial refers to the life or lives sacrificed for a particular set of values. Memorials embody grief, loss, and tribute or obligation; in doing so, they serve to frame particular historical narratives.5

Also, cemeteries have become a relatively forgotten program in contemporary Western culture, but memorials are increasingly the focus of contemporary design and cultural debates. The focus of this thesis is reinstituting cemetery design within contemporary society. Therefore, studying

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precedents that have already reconsidered the spatial situations of *dead to living* will facilitate the pedagogical transition into the architecture of the cemetery.

The definition through which I regard the memorial is “an artifact that imposes meaning and order beyond the temporal and chaotic experiences of life.”⁶ Memorials communicate historical narratives deeply rooted in the concept of historical consciousness, which societies and individuals hold as memory. In Memory, Distortion, and History in the Museum, Susan A. Crane explains:

> The phenomenon of historical consciousness continually exceeds those documentable moments… Many historians may have anxiety about, or disdain for, the unincorporated realm of personal historical memory, seeing it as evidence of ignorance, willful prejudice, emotional needs, or lack of understanding… This “excess” of memory, personal and yet publicly formed, complicates historical practice and creates a new object of historical study at the intersection of the personal and the public.⁷

The memorial intersects the individual and collective memory, transcending historical fact by layering symbolic and phenomenologically charged spaces. It incorporates the “excess” of memory into its narrative, providing unique experiences for each visitor: a memorial will arouse much different emotions from a veteran from that war than a civilian who experienced it as a child. A Holocaust Memorial will undoubtedly evoke different sentiments from a German than an American. This plasticity allows for the visitor to be simultaneously alone in his individual memory and unified within his greater context. While memorials do not hold the body of the dead, they are saturated with the memory of people and events of the past, capturing historical significance and reinventing the way one remembers. Thus, memorials are invaluable to studies

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in redefining funerary architecture within contemporary culture, for they have already provided that culture with architecture of memory.

The Constructed Cemetery

Constructing a place to house the dead maintains an explicitly architectural topos (Figure 2-4). It is not founded upon the physical decomposition of the human body within the earth, rather the tectonic holding and preserving of corpses. Evidenced in mausoleums, sepulchers, and columbaria, this type is constructed according to the scale of the human body, many containing overheads for protection and chapels for worship. Placement above ground offers a physical coexistence upon the earth; the living and dead are similarly housed within the same space, objectified dwellings on the ground surface. It is architecture for the dead that resembles architecture for the living.

The Construction and the Monument

The use of a constructed monument within funerary architecture is one of the oldest and perhaps most lasting of the burial practices. Monumentality evidenced wealth, power, and eternal presence; it was a symbol of the eternal. The monumentality that is attributed to kings, pharaohs, and beloved wives in death does not respond specifically to the intimacy between the living and dead; they do not outwardly reveal the scale or placement of the body within. Instead, these were instituted as iconic symbols, the presencing of an individual for an entire civilization to honor. Ignasi de Sola Morales explained:

The idea of monument that I want to bring in here is that which we might find in an architectonic object: for all its being an opening, a window on a more intense reality, at the same time its representation is produced as a vestige, as the tremulous clangor of the bell that reverberates after it has ceased to ring; as that which is constituted as pure residuum, as recollection.\(^8\)

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To this effect, I align the physically monumental with the experientially monumental.

Constructing the monumental burial places, either proportionately or phenomenologically, to emanate the power of the dead offers much potential to the discipline of architecture. As Louis Kahn described:

Monumentality in architecture may be defined as a quality, a spiritual quality inherent in a structure which conveys the feeling of its eternity, that it cannot be added to or changed...Monumentality is enigmatic. It cannot be intentionally created. Neither the finest material nor the most advanced technology need enter a work of monumental character for the same reason that the finest ink was not required to draw up the Magna Carter.\(^9\)

**Cemetery Precedent: Brion-Vega Cemetery**

Italy’s Brion-Vega Cemetery is an example of a constructed cemetery. It is not monumental in a typical sense, rather it achieves monumentality through detail and perspective. Designed by architect Carlo Scarpa, it serves as a private burial ground for the Brion family, wrapped by a more traditional cemetery plane outside its boundary walls. Designed as a collection of “objects in a field”, this cemetery includes programmatic components that offer the living a specific experience: a constructed entry, a chapel, a meditation pavilion, the tombs for and tombs for the Brion’s and their extended family. Each programmatic component operates as an independent architecture, yet thresholds, reveals, and integrating water constantly lead the visitor across the grounds, through infinite potential itineraries. It isolates the living, presents them to the dead, and engages them with other living in order to worship together and honor and their shared patronage.

**The Celebrated Detail**

While the Brion Cemetery does not represent monumentality in a traditional sense, it is expressed is through the nature of the celebrated detail. At each threshold into and between

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spaces, there lies a reveal, a symbolic recollection, or reorientation. One example of this lies in the gate between the entry and the meditation pavilion. The entry piece is a thick concrete structure that holds a gate, a window, and a threshold, each leading toward an independent trajectory.

Taking the trajectory that leads to the meditation pavilion expresses the monumental passage through the celebrated detail. To access this pavilion, which seemingly floats within a pool of water, one must cross a glass gate that presses into the floor, submerged into the water below. This simultaneously foreshadows the water that surrounds the pavilion and indicates the space’s current use. Also, the mechanism that allows for the door to submerge is exposed from the exterior of the thick entry, with a complex series of pulleys that allow the movement of the door to be revealed, though the living remain concealed. It is a celebration of the details and a preparation for the living to move into the pavilion, which ultimately repositions them toward the most significant cemetery component: the exposed tombs of Mr. and Mrs. Guiseppe Brion, standing across the distant field. Each step through the cemetery is highlighted as an event, constructing a monumental experience through the articulation of detail.

The Reoccurring Perspective

In addition to the constructed itinerary through the series of constructed spaces, the tombs of the Brion’s are revealed as a monument of throughout the cemetery. The two leaning tombs stand in the field protected and identified by an arched piece that accentuates the union in death. It is a construction that stands out among its larger programmatic pieces, as it is formally distinct and constantly revealed through recurring perspectives. In the meditation pavilion, it is seen at a distance, through interlocking circles that direct the eyes toward the tombs. From the chapel, a series of windows and doors provide glimpses of the arch, which is more fragmented but ever present.
I thus cite the Brion-Vega Cemetery as a *constructed cemetery*, not because of the scale or proportion of the tombs, per se, but for the monumentality of experience and significant presence of the tomb. It is an example of architecture that allows the living to dwell beside, honor, and celebrate their dead.

**Dead Beside**

The relationship that emerges from the placement of the dead within a construction or monument is that of the *dead beside* the living. Dwelling within the same world as the living offers the impact of the living facing the dead. It is this direct impact that must be captured to fully employ the potential of this spatial situation.

**Memorial Precedent: Vietnam Veteran’s Memorial**

A memorial that re-presents the experiential impact of *dead beside* (Figure 2-5) is the Vietnam Veterans Memorial, designed by architect Maya Lin. Placed within the Mall lawn of Washington DC, this project inverts the surrounding strategy of objectified white monuments, strengthening its experiential impact. Instead of a towering white presence, two black granite walls slice into the lawn, extending toward its two most significant juxtapositions, the Washington Monument and the Lincoln Memorial. Lin explained,

> I wanted to work with the land and not dominate it. I had an impulse to cut open the earth…an initial violence that in time would heal. The grass would grow back, but the cut would remain, a pure, flat surface.

Lin’s conceptual process describes a metaphorical wound that, unlike the Washington and Lincoln, does not commemorate a triumph, but a national tragedy. It is expressed through a slice in the earth, healed and retained by two black walls. As Marita Sturken described, the metaphorical wound:

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Evokes the many different bodies - the bodies of the Vietnam War dead, the bodies of the veterans, and the body of the American public. The memorial is seen as representing a wound in the process of healing, one that will leave a smooth scar in the earth. This wound in turn represents the process of memory.\footnote{Ibid. p. 16.}

While the walls of Brion offer the module of the individual body, this memorial imparts the collective presence through categorized names. Lin transformed the spatial topos of dead below by inscribing the names of every fallen soldier into the Wall, arranged chronologically according to death. The living descend into the earth and stand at eye level with countless dead; they may touch the names, see their image reflected in the blackness of the polished granite. Lin incorporated the spatial relationship of *dead beside* in order to achieve the superimposition. In a single moment, the living and the dead are intersected as individual and collective memories fuse. The phenomenological effect of this Wall is achieved through a single gesture that Marita Sturken calls a screen:

> A screen can be a surface that is projected upon; it is also an object that hides something from view, that shelters or protects. It can be a surface or even a body - in military language a screen is a ‘body of men’ who are used to cover the movements of an army. Freud’s screen memory functions to hide highly emotional material, which the screen memory conceals while offering itself as a substitute. The kinds of screens that converge in the Vietnam Veterans Memorial in Washington, D.C., both shield and protect: the black walls of the memorial act as screens for innumerable projections of memory and history.\footnote{Ibid.}

**Evidence through the Artifact**

Human ritual is not only evidenced through the experience of the Wall, but in the artifactual objects left behind. Sturken cites the need to transfer private memories into public sentiments as the primary reason for so many personal items to be left at this memorial, “photographs, letters, teddy bears, MIA/POW bracelets, clothes, medals of honor - are offered up...
as testimony, transposed from person to cultural artifacts, to bear witness to pain suffered."¹³

These items are not necessarily extraordinary in quality or rarity, but the individual selection by those grieving and their placement along the Wall give them national worth that they would otherwise not possess. They make public the private grieving, unifying people of all ages and affiliations within the cultural memory of the War.

Two of the most commonly left items left at the Wall are soldier’s dog tags and notes to the soldiers; one is an offering of a personal item, one of personal sentiment. Kristin Ann Hass addressed this in Carried to the Wall: American Memory and the Vietnam Veterans Memorial. She proposes explanations for the symbolic meaning behind leaving the tags at the Wall:

These tags do not echo a name already on the wall; instead they add a new name. These new names are a different kind of intervention in the crisis of memory. They unofficially introduce the surviving veteran into the conversation; they establish a link between the status of the dead soldiers and the status of the living soldiers. They make it clear that it is not only the dead but also the survivors that are being mourned. You might leave your dog tags because you don’t understand what it means to survive this war. You might leave your dog tags because you want to reject your generic military identity. You might leave them because you want to leave behind the body that fought. You might leave them because your grief or your service needs to be remembered. You might leave them because you don’t understand why you survived. You might leave them because you feel as though you did not survive. Leaving a dog tag at the wall uses a literal token of citizenship to make an explicit assertion of the memory of a particular loss at the same that it lays open a series of questions about patriotism.¹⁴

Among the collection of symbolic offerings and cultural remnants lies the quiet presence of paper, the letters to the dead. The words evidence clarity of thought and confusion of reason, challenge the reality of death while narrating its acceptance; they are intimate and universal. The living do not write for the dead, they write for themselves; they say that which was left unsaid, share their pain with all who read their words. The national narrative lies in the fragments of

¹³ Ibid. p. 19

these individual recollections; through the thinness of white paper contrasting the thickness of black granite, a nation once severed by tragedy is reunited as one:

Dear Smitty, Perhaps now I can bury you; at least in my soul. Perhaps, now I won’t again see you night after night when the war reappears and we are once more amidst the myriad hells that Vietnam engulfed us in…. I never cried. My chest becomes unbearably painful and my throat tightens so I can’t even croak, but I haven’t cried. I wanted to, just couldn’t. I think I can today. Damn, I’m crying now. Bye Smitty. Get some rest.

-Anonymous note at wall

I came down today to pay respects to two good friends of mine. Go down to visit them sometime. They are on panel 42E lines 22 and 26. I think that you will like them.

-Anonymous note at wall

We did what we could but it was not enough because I found you here. You are not just a name on this wall. You are alive. You are blood in my hands. You are screams in my ears. You are eyes in my soul. I told you you’d be all right, but I lied, and please forgive me. I see your face in my son, I can’t bear the thought. You told me about your wife, your kids, your girl, your mother. And then you died. You pain is mine. I will never forget your face. I can’t. You are still alive.

-Anonymous note at wall

The Cemetery Plane

That is one of the ironies of our life worlds: they receive their animation from the ones that underlie them. - Robert Pogue Harrison

In the cemetery plane topos (Figure 2-6) the dead lie resting side by side within the same strata of earth. They occupy a plane of earth that parallels the living, dwelling within a sub-surface of our world. Symbolic and cultural implications have developed throughout history that account for the use of this burial strategy. In the Hebrew faith, this expresses symbolic equality in death through the alignment of rabbis, gentlemen, and beggars. To the military, it demonstrates a collective purpose in life, as the unit overshadows the individual soldier. Yet,

15 Ibid.
16 Ibid.
through each ideological purpose there remains a primitive motivation: the requirement of physical decomposition. While there are various symbolic and methodological rationales, burying within the horizontal stratum of a cemetery plane remains the most ubiquitous form of burial, providing a homogeneous relationship between the dead the dead.

**Various Manifestations of the Plane**

The uniformity within this topos does not suggest that there are no variations. In fact, applying a consistent strategy within contrasting contexts often makes the differentiations more evident. Consequently, the cemetery plane offers a broad scope of examples, as each environment, culture, and site impact the articulation. One juxtaposing distinction lies in the density of graves, evidenced through the juxtaposition of the quintessential cemetery plane, Arlington National Cemetery (to be discussed further in the following section), with the inconsistency within the Jewish Cemetery in Prague. In the Jewish Cemetery, a limited amount land leads to incredible densities of layers. Instead of each body being contained neatly below the surface of the ground, bodies are stacked into disorderly layers, sometimes up to seven corpses deep at a single point. The rise in population is evidenced through the rising ground plane, and most open space designated for the living’s circulation has been lost; the living visit their dead by walking over these layers. The consequential palimpsest of many generations has created a ground condition rich with mystery and historical depth.

**Cemetery Precedent: Arlington National Cemetery**

A cemetery precedent that captures the essence of the cemetery plane is Arlington National Cemetery. More than 300,000 dead evenly cover hundreds of acres, marked by fields of white tombstones in perfect alignment; the soldiers lay in death as they stood together in life: consistent and steadfast, a single unit of many.
The irony behind a national cemetary that embodies national patriotism lies in its establishment through a national rift. Passed through the lineage of Martha Washington, this estate came into the possession of Confederate Officer Robert E. Lee through his first wife Mary Anna. Union General Montgomery C. Meigs seized the property in 1864, claimed for the sole detriment its owner. Through this exchange, a sacred family estate became a prize for the enemy, then later a sacred symbol for a unified nation. Robert N. Bellah explained:

The new symbolism soon found both physical and ritualistic expression. The great number of the war dead required the establishment of a number of national cemeteries. Of these, the Gettysburg national cemetery, which Lincoln’s famous address served to dedicate, has been overshadowed only by the Arlington National Cemetery. Begun somewhat vindictively on the Lee estate across the river from Washington, partly with the end that the Lee family could never reclaim it, it has subsequently become the most hallowed monument to civil religion.19

In this cemetery, the dead of many battles and are placed within a single plane, honored today as a unified body.

The individual and collective presencing within Arlington both exemplifies the cemetery plane topos. The vast majority of graves are spaced at even intervals, sweeping across the landscape. This continuity offers a visual to the vast number of soldiers that are interred within a single landscape. New and old burials are only evident through the patchiness of dirt and grass, and the soldiers today are buried with no arrangement of ranking, race, or gender. This lack of hierarchy accentuates the collective dead, as the impact does not result from a single soldier, but soldiers in mass.

Dead Below

The ritual of burial arose from our natural intrigue of the dead. We are drawn to the graves of those with whom we identify, for to honor their life is to honor our own. We are likewise

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drawn to the graves of the unknown, seeking to understand another’s history, culture, and past times. But while we may be inclined visit both extremes of emotional proximities, the impact would correspond with our relationship to them. Transitioning from the spatial relationship of dead to ground to the experiential dead to living relationship must begin by understanding nature of this connection. Were the living and dead friends, comrades, enemies? Did they share a common culture, a similar death, or are they simply curious strangers?

By initiating the design to enhance this relationship, the dead may be presenced in the most befitting way. Placing this as a foremost concern focuses the narrative to evoke a worthy sentiment, and is a primary motivation for the dead below precedent (Figure 2-7).

Memorial Precedent: Jewish Museum in Berlin

I propose the Jewish Museum in Berlin as the example of a memorial that captures the experience of this spatial topos. Commemorating Jewish history within a place of Jewish absence is a challenge and an inspiration; it recalls a history that is painful and dishonorable. The narrative of this museum expresses this pain, capturing the historic relationship between German and Jewish people.

Architect Daniel Libeskind designed this museum to be “crucially an architecture of memory” as it does not commemorate an existing people, but the absence of a people. This project, termed Between the Lines, is based geometrically the interrelationship of two lines:

One is a straight line, but broken into fragments; the other is tortuous and complex, but continuing indefinitely. These are the two lines of contemporary dichotomy, the lines which create the rift between faith and action, between political belief and architectural response.21

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Between and shared by these lines is the museum itself, which relies on Voids to express the project’s narrative, the overwhelming absence of the Jewish population within post-war Berlin. To this Libeskind noted that very little still Jewish presence remains in Berlin, “small things, documents, archival materials, evocative of an absence rather than a presence.”\textsuperscript{22}, the fact which prompted his decision to physically construct this absence. I consider these Voids the memorial spaces that exemplify dead below. As Andreas Huyssen explained,

The void thus becomes a space that nurtures memory and reflection for Jews and of Germans. Its very presence points to an absence that can never be overcome, a rupture that cannot be healed, and that certainly cannot be filled with museal stuff… [it] may be a better memorial to German and Jewish history, the history of the living and the dead, than any official funereal Holocaust monument could possibly be.\textsuperscript{23}

**Phenomenological Intersection: Sound and Image**

The acknowledgement of dead below most often occurs through the use of physical markers, tombstones, and ground undulations. In these, vision is the means through which one ascertains these burial cues. While traditional, we must question the depth of this effect and possibilities for sensual translations within an architectural design. How would dead below feel to the touch? How might it sound? Libeskind uses phenomenological intersections within the Jewish Museum to express this relationship, isolating and integrating several senses. Dead below within the memorial Voids are increasingly heightened through this programming of phenomena.

Libeskind calls this the musical dimension of this work. The inspiration for this experiential strategy came from the unfinished opera Moses and Aaron, composed in Schonberg in Berlin. Libeskind found that the metaphorical narrative of the opera aligned with the historical narrative of the project: the futility of Moses and Aaron, who were empowered by the

\textsuperscript{22} Ibid.

gifts of knowledge and speech, to effectively convey God’s message. The hopelessness expressed within this narrative extended beyond the metaphorical foundation of the Jewish museum, it provided a method of execution. The opera remained unfinished, a consequence of Schonberg’s own loss of inspiration. Libeskind was impacted by both the futility of such a talented composer and his execution of the final note, the opera’s termination at the end of act II.

He explained:

Moses is left alone to sing the words… ‘I have fashioned an image too, false, as an image be. Thus I am defeated! Thus, all was but madness that I believed before, and can and must not be given voice. O word, thou word, that I lack!’ All this is sung; but the last line, ‘O word, thou word that I lack!’ is not sung anymore; it us just spoken. At the end of the opera you can understand the word because there is no music: the word, so to speak, has been isolated and given a completely nonmusical expression. That is the end of the opera as Schonberg composed it.24

The opera is complete, the people of Israel remain in a state of unrest, and Moses is defeated, only expressed through the isolation of spoken word.

Libeskind achieves this phenomenological isolation in the Void space pictured above. In order to move through this space, the visitor is forced to walk over hundreds of metal plates, into which are cast expressionless abstractions of a face. With each step sounds the clanging of metal, a cacophony that pierces the silence of the Void. Intersecting the phenomenon of sound is the image of a lost people. The subtle variations within the metal faces present a people once considered identical under the branding of Jew, proclaiming individuality within perceived sameness. At this point in the Void, dead below is inescapable: it is expressed through the echo of clanging and the sea of empty faces. Just as Schonberg emphasizes the importance of the final line, “O word, thou word that I lack” by terminating the musical context of the opera and

isolating the word, Libeskind emphasizes the memory of a people through piercing the context of silence and isolating the image.

The Urban Cemetery

The two previously addressed topoi represented the cemetery within a singular form: *dead above*, and *dead below*. However there is not always a singularity of burial method within a specific cemetery, as the expression of the cemetery often relies on the intersection of the two situations. The dense integration of the first two topoi constitute the *urban cemetery*, which relies on the duality of both dead above and below. I term this spatial topos “urban” based on two principle characteristics: (1) vertical constructions within the urban condition creates interstitial and public spaces for the living to inhabit, and (2) zonal juxtapositions (horizontal/vertical, dense/sparse) that offer coexisting typologies and accentuate variations. The urban cemetery thus constitutes a heterogeneous condition in which the dead may be presenced as individuals, within a familial unit, or according to their occupational nature. This results in a cemetery space deeply saturated with customs, relationships, and traditions that offer a variety of experience to the living visitor.

Cemetery Precedent: Mount Auburn Cemetery

Mount Auburn Cemetery in Cambridge, Massachusetts is an example of the *urban cemetery* (Figure 2-8). It hosts a variety of burial types: towering monuments, a miscellany of burial markers, and fields of nameplates flush with the earth. It was America’s first “garden cemetery,” thus termed for its picturesque integration of landscape with graves. Drawing from the Parisian Model of Pere-Lachaise Cemetery, the burial of dead within an honored and maintained ground presented a new perspective of death and the role of the dead within the living culture. As Ken Worpole explained:
The success of Mount Auburn also popularized the use of the word ‘cemetery’ in North America for the first time, rather than ‘burying ground’ or ‘graveyard’. The associations of the word ‘cemetery’ with sleep, rather than with death and decay, was part of a sea-change in American attitudes towards these landscapes and sovereign places.\(^{23}\)

One of the striking conditions of Mount Auburn is the method through which the living come dwell within the space. While many cemeteries only offer a place for the dead to be mourned and honored by those with whom they shared life, Mount Auburn offers a place for the living to engage also with the living. Within the gates, one might find visitors picnicking at the edge of a lake or wandering along the paths in conversation. It is not solely a place to visit briefly, but a park or garden-like space in which to “be”, a place that offers reprieve from the surrounding city. This effect assuages the fear that is instilled by many other cemeteries, offering the living a chance to commune with each other, and with the dead.

**Juxtaposed Integration**

Mount Auburn is probably best known as the first rural garden cemetery in the United States. For the two centuries before it was founded, life in Boston may have been hard, but death was even worse. The Puritans who first settled New England were an apocalyptic lot who warned of fiery post-mortem fates in their sermons and disposed of their dead accordingly. The bodies of Boston’s dead were buried in urban graveyards that quickly became overcrowded…new bodies were often buried on top of old ones, sometimes marked and sometimes not. City graveyards often had distinctive pockmarks, since thin wooden caskets crumbled with age, causing the earth to collapse into the interred remains. -Susan Wilson\(^{26}\)

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Mount Auburn Cemetery emerged from the context of execrated burials and deep fear of death as a cemetery of extreme juxtaposition. The cemetery not only arose as a contrast to its surrounding cemetery precedents, but it integrated scales and subjects to present an image of Boston’s social history that accounts for all types: a constructed mausoleum is framed by a field of tombstones (burial integration), obelisks stand before the view of the distant Boston skyline (urban integration), trees are named and scattered among the burials (environmental integration) and the wealthy are mixed within the common (social integration). This presents to the living a multivalent expression of Boston, while the embrace of such dynamic inclusions allows new burials to proceed without the pressure of conforming to a singular burial method. New is integrated within the old through large constructions alongside fields of modest tombstones, offering the urban palimpsest that befits its spatial topos.

**Dead Around**

In addition to the coexistence of the various burial typologies found in the urban cemetery (Figure 2-8), the *dead around* topos (Figure 2-9) includes notions of duality and time. In this, human ritual provides a complexity that extends the relationship of this topos: temporal perception and memory. In the urban cemetery topos I identified Mount Auburn as a quintessential spatial situation as it is demonstrated within a single precedent. *Dead around* addresses the same heterogeneity, though it extends to include heterogeneity in multiple locations- the dead in a place, the memory of them elsewhere. This classification is different in the fact that the initial burial-place is not the final resting place. The emergence of this topos is largely attributed to necessity and constraints, although the impact of this condition on each cemetery differs. It derives from the impossible intersection of time, territory, and a place that is insufficient for the dead population it must hold: the cemetery must cycle its dead in order to maintain a constant capacity.
Ritual Extension of Dead Around

Cyclical duality within a cemetery involves the temporary burial of a body in order to satisfy the requirement of decomposition. In time, when the body has decayed, the remaining bones are exhumed and relocated. This is the practice in the Venetian cemetery, San Michele Cemetery Island. Venice as a physical context has particular uniqueness, as ground is limited, isolated, and man-made. Since land must be used prudently, bones of the decomposed are relocated to ossuaries that occupy a different part of the island. The result is an extremely layered cemetery situation—cycling generations of temporary interment with separated ossuaries for permanent containment. In contrast to permanent graves, which afford the coexistence of many generations, San Michele holds the dead of only a very specific period of time. As Theophile Gautier recalled during his Venetian travel,

 Dominating the prospects from the quay is the cemetery island of San Michele. Stravinsky, Diaghilev, and Ezra Pound all have their graves here. Before them Frederick Rolfe, Baron Corvo, had been buried here in 1913.²⁷

The cemetery ritual in Hong Kong maintains the same cyclical duality as San Michele, although each body placement provides a unique relationship with the living. While there is a change in the spatial positioning in San Michele, visiting the dead in each placement provides a similar impact. In Hong Kong, however, the experience of visiting the dead buried within the earth and those who have been exhumed and placed into ossuary urns is quite different. At the point of exhumation, the family prepares the bones through a ritual washing, placing them into a mountainside urn. The dead within the urns maintain a new relationship with the living, as they are dispersed vertically into a mountainside that overlooks the city. In addition, the physical boundaries between the dead and living are different in each position. When buried within the

²⁷ Ian Littlewood, A Literary Companion to Venice: Including Seven Walking Tours (MacMillan, 1992).
cemetery, the dead are sealed within plane of earth, alongside other dead. Within the urns, however, the dead are visible, occupying pockets and nooks within the mountainside. They are in backyards, along roadsides, and between houses, accessible and open-able to all.

Memorial Precedent: New England Holocaust Memorial

The New England Holocaust Memorial in Boston, Massachusetts captures the essence of dead around by (1) encapsulating multiple phenomena through body in space, and (2) the distance from which the project memorializes an event. Located in Boston, Massachusetts, architect Stanley Saitowitz constructed the memorial of six steel and glass towers—each 54’ high—placed at consistent intervals along an axis of circulation. This axis falls on the path of the Freedom Trail, which is deeply imbedded with American colonial history. Therefore, the placement of a modern international memorial within a colonial national context distinguishes it thematically and architecturally, mediating between the old and new.

Below, Beside, Within, and Onto

Memory erupts into and shapes “public space” in various and often ambiguous ways, as a monumental public art. The erection of monuments is a central means of shaping memory.  

Dead around (Figure 2-9) within this memorial is achieved through symbolic representation and the phenomenological relationship to the living. Symbolically, the six towers reference the six concentration camps in which the Jewish people perished, the symbol of tragedy. However, six is also the number of candles in a menorah, the Jewish symbol for hope. The simultaneous symbolic meaning allows for a plasticity of interpretation, which may shape its experiential impact according to the individual:

Each of the six towers is engraved with a million prisoners’ identification numbers...Since these numbers can tattoo any visitor to the memorial, the Holocaust is universalized constructing a collective yet malleable group identity or a universal understanding of suffering...anyone passing through the memorial- Jew or Gentile, foreigner or American-can be subjected to such humiliation if freedom is not maintained. The memorial emphasizes American visions of universal freedom rather than simply memorializing those who died during the Holocaust.29

The spatial and symbolic construction directs the shaping of this memory; through the phenomena of the senses and the historic international narrative. The casting of the numbers onto the skin of the living and the rising space of the towers above the grated embers below offers an understanding of the dead around.

**The Distant Memorial**

Creating a memorial for an event such as the Holocaust within America affords numerous reconsiderations of the historical narrative. Peter Novick noted:

...throughout continental Europe, the great majority of the population has had close family ties to people connected to the Holocaust: mostly as witnesses, but as perpetrators and survivors as well...[but] For a great majority of Americans, the sense of the Holocaust as our history- part of our narrative- lacks the human foundation that it has in Europe.30

The appropriation of such a memorial, however, is invaluable to a country that is founded upon the mixing of cultures, for it recalls an event that impacted only a fraction of its population- in this case, the relocated Jewish Europeans who fled to America. This further recalls the dead around topos, as the present victims of a distant tragedy initiated it.

The audience to which a memorial addresses unquestionably impacts design execution. Just as Libeskind uses the near void of the Jewish presence, the architect Stanley Saitowitz used the “excess of memory” and symbolic overlaps to speak to the American population:

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29 Ibid.

Look at these towers, passerby, and try to imagine what they really mean - what they symbolize - what they evoke. They evoke an era of incommensurate darkness, an era in history when civilization lost its humanity and humanity its soul.\textsuperscript{31}

Understanding the distance through which the American culture experienced the Holocaust presents the opportunity to reach beyond the historical narrative, to critique the fundamental human flaw from which the events originated. The ideological symbols accounted for in this memorial capture the emotion of a tragedy, offers a broader answer to the question of “why”. It is as intimate as a number cast on skin and as universal as evil, a duality that captures the impact of \textit{dead around}. Elie Wiesel stated:

\begin{quote}
We must look at these towers of memory and say to ourselves, No one should ever deprive a human being of his or her right to dignity. No one should ever deprive anyone of his or her right to be a sovereign human being. No one should ever speak again about racial superiority... We cannot give evil another chance.\textsuperscript{32}
\end{quote}

\textbf{The Invisible Cemetery}

I have identified the initial three spatial topoi according to the physical presencing of the dead within a context. These spaces are recognizably burial grounds, offering the living an opportunity to visit and honor their dead within a place. However the final topoi is, in a sense, the absence of the former three. The paradoxical situation in this- \textit{the invisible cemetery}- is that it is not programmatically a cemetery at all (Figure 2-10). Instead, the dead’s presence is hidden or forgotten, though the fact of the death remains.

\textbf{Methods of Invisibility}

The scattering of ashes is the primary cause for the \textit{invisible cemetery}. Through the process of cremation and the dispersal of remains throughout a landscape or body of water, there is literally no physical trace left of the dead upon the earth, only the memory of their presence.

\textsuperscript{31} Elie Wiesel, http://nehm.org/intro.html

\textsuperscript{32} Ibid.
within a specific context. As the individual often prescribes the site and method of scattering prior to his death, it deals much more with the relationship between the dead and a place, rather than dead and dead or a marker by which the living may honor and remember. This return to earth constitutes a burial practice that has been used for millennia, and imposes the least impact of the dead upon their final context. Ken Worpole stated:

It has been very difficult to produce a robust, let alone grandiloquent, architectural response to the housing of very small amounts of human ash. Perhaps those who choose cremation prefer it this way: cremation is, after all, an anti-monumentalist impulse in a non-Heroic Age society.33

An additional burial method that results in an invisible cemetery is the “natural burial,” burying with little preservation to the corpse and within easily decomposable coffins or bags. This is a full circle return to the burial process initiated with the earliest human civilizations, a contradiction for cultures that are otherwise increasingly dependent on technology and scientific advancements. Natural burial affords the body a return to the earth, often marked by a tree or plant that precipitates the process of regeneration. Marquis de Sade explained:

Once the grave has been filled in, it will be planted with acorns so that in no time to come the site being covered over and the corpse being once again as thickly wooded as it was before, the traces of my grave will disappear from the surface of the earth, just as I am pleased to think that my memory will be erased from the minds of men.34

Cemetery Precedent: Washington Square Park

The example to which I attribute the theme of the invisible cemetery is Washington Square Park, located in New York City. In reference to the nature of the Washington Square Park of today, author Emily Folpe wrote:

It defies easy categorization, and critics have complained that is neither a park, a tranquil green, nor a town square. No sheep were intended to graze on its grounds, as the did on


34 Ibid. quoted p. 90
the commons of old New England towns, nor were any introduced later for pastoral effect, as the were at Central Park. The Square is leafier than most European plazas and piazzas, but like many public places of such older cities, it resembles a great outdoor room whose walls are formed by the buildings around it…Through nearly two centuries, the Square has been a place to linger, to play, to declaim; to celebrate, demonstrate, and mourn…It functions as a campus green, a crossroads, and a top spot for people watching. Washington Square is a place not to escape from city life but to enter into it.35

Folpe did not address the forgotten bodies that lie below the surface of the park.

Following the Revolutionary War and growth of New York City, it was in the custom to use public land for the interment of the poor and unclaimed. Washington Square Park was one such public domain, called a potter’s field, a primitive answer for the disposal of the many victims of yellow fever.36 By 1825, the east two-thirds of the park were filled with burials, possibly as many as 20,000 bodies over 28 years. However, with the growth of the city came an increasing need for public land and park space; the burials were terminated, but the bodies remain.37 A report prepared for the for the New York City Department of Parks and Recreation recalled the city’s transformation of the square:

The old Potters Field is now leveled, and is formed into a beautiful public square, called Washington Square, which is also used as a military parade ground.38

There is no current acknowledgement or marker for the 20,000 bodies that lie buried below the Square today. It is an invisible cemetery that offers a playground for the unaware living within New York City, built upon the forgotten dead of its past.


37 Ibid.

38 Ibid.
Dead Remembered

When the programming for containing the dead is not assigned to or acknowledged within a place, the dead are honored through the realm of private memory. It is the least articulate and most intimate form of memorial, as it exists only within the living, an anti-burial obscured by its placeless existence. Its inclusion of dead remembered (Figure 2-11) within the precedents of spatial topoi offers the absence that emphasizes the otherwise present. At the end of his stay in a concentration camp, Holocaust survivor Andre Schwartz-Bart wrote:

So this story will not finish with some tomb to be visited in pious memory. For the smoke that rises from the crematoria obeys physical laws like any other: the particles come together and disperse according to the wind, which propels them. The only pilgrimage, dear reader, would be to look sadly at the stormy sky now and then.

Memorial Precedent: Shanksville, PA

Identifying a memorial that operates solely through the expression of dead remembered is a contradictory provocation, as a memorial relies on a physical structure or monument to recall memory. The “un-memorial”, therefore, offers the memory of the people as the constructed memorial; the pilgrimage is honor bestowed, and the absence creates the impact. To demonstrate the presence of this, I cite an empty field where the victims of Flight 93 perished.

Six-plus years after September 11, 2001, the memorials in New York and Washington are finally taking shape. But Shanksville, where Flight 93 crash-landed in rural Pennsylvania, is only a naked field…this story, brings thousands to Shanksville every year. Many expect to see something bigger, something greater. Something monumental. Instead, the community volunteers- the Flight 93 Ambassadors- point to an American flag mounted on a fence about 500 yards away, just inside the tree line: That’s where it happened. That’s where the plane came down. Sacred ground. See how the hemlocks are burned?39

With no physical structure, only a single flag and scarred earth to account for the event, what constitutes this as a memorial? Afterall, the absence of such markers might prove its insignificance, or the general forgotten state of the dead. However, the living response to this

place illustrates the honor that is bestowed upon the dead. Thousands take the pilgrimage, pause at the field for remembrance, and leave artifactual residues to evidence universal and individual honor:

An oblong stone, painted black and inscribed, ‘We Remember 5000+ victims,’ shares ground with a purple My Little Pony and a plastic Pooh Bear. Dozens of baseball caps hang from the fence, some personalized and others only logos...A laminated story of ‘The tragedy of 9-11-01,’ by eighth grader Sarah Marie Reynolds. Stylized flags of the pentagon and Twin Towers. American flags. A stuffed lion. White plastic crosses.\footnote{Ibid. p. 21}

Without a constructed memorial to recall the events of the day, these artifacts alone capture the narrative of this national memory.

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\begin{figure}
\centering
\includegraphics[width=\textwidth]{diagram.png}
\caption{A series of diagrams that express the spatial topoi. The top row address the dead to ground relationship, which will be addressed through the precedent of the cemetery. The bottom row address the dead to living relationship, with “l” representing the position of the living, and d representing the position of the dead. (Diagram by Kelly Ard)}
\end{figure}
Figure 2-2. The dead to ground series. This collection express A) constructed cemetery  B) the cemetery plane C) the urban cemetery D) the invisible cemetery. These will be explained and supported by precedents I will present in the sections to follow. (Diagrams by Kelly Ard)

Figure 2-3. The dead to living series. A.) dead beside  B.) dead below, C.) dead around, and D.) dead remembered. These will be explained and supported by precedents in the sections to follow. (Diagram by Kelly Ard)

Figure 2-4. *The constructed cemetery* spatial topos. (Diagram by Kelly Ard)

Figure 2-5. *The constructed cemetery* spatial topos. (Diagram by Kelly Ard)

Figure 2-6. *The cemetery plane* spatial topos. (Diagram by Kelly Ard)

Figure 2-7. *The dead below* spatial topos. (Diagram by Kelly Ard)
Figure 2-8. The urban cemetery spatial topos. (Diagram by Kelly Ard)

Figure 2-9. The dead around spatial topos. (Diagram by Kelly Ard)

Figure 2-10. The invisible cemetery spatial topos. (Diagram by Kelly Ard)

Figure 2-11. The dead remembered spatial topos. (Diagram by Kelly Ard)
CHAPTER 3
PROGRAMMING PEDAGOGIES

I have thus far presented two ideological statements: (1) the forgotten significance of the cemetery within the human consciousness, and (2) existing precedents that respond to that requirement, the spatial topoi. However, the simple identification and explanation of our current state of cemetery design is not enough to frame the potential for contemporary funerary architecture. We recognize the need, but we must be willing to propose a strategy for the trajectory of cemetery design. This provocation was the focus for a second year design studio. Through the following curriculum, the students engaged in a design methodology that addressed architectural design, but also proposed strategies for reintroducing cultural memory into the cemetery. The answers to the questions I have presented do not lie in a singular solution, but in an array of possibilities.

The design was developed through a series of processes, each step highlighting a particular aspect of architecture: the establishment of place, the serial reconsiderations of spatial programming, and the articulation of an architecture that captures the phenomenological impact of the dead. While this is undoubtedly one of many possible design processes, this proposes one method of responding to a forgotten cultural memory, considering the reintroduction of an ancient program into the contemporary world. Robert Pogue Harrison stated,

If cultural memory has a future, which at present seems doubtful, the twentieth century will one day be remembered as the fitful and prolonged continuation of a process that began in earnest a century earlier: the end of the Neolithic era. Throughout this era, which got under way with the domestication of animals and the discovery of agriculture, the great majority of human beings lived and toiled on the land where their ancestors were interred, where they and their children and their children’s children would also be interred. This is no longer the case in Western societies. For the first time in millennia, most of us don’t know where we will be buried, assuming we will be buried at all. The likelihood that it
will be alongside any of our progenitors becomes increasingly remote…Nothing speaks so eloquently of the loss of place in the post-Neolithic era as this indeterminacy.¹

By recognizing the indeterminacy of our era, we may push reinstitute a determinant place for the dead. The following work strives to reintroduce cultural memory and place through the program of the cemetery.

**Place within the Formless Territory**

The application of the cemetery as an architectural context was integrated within the students’ fourth semester of architecture: the desert project. This project is placed within the curriculum in order to challenge contextual preconceptions, to consider place-making within a place-less condition. The desert provides for this. It is sublime- endless, formless, and rich with many layers of physical and phenomenological systems. The desert may simultaneously arouse terror, despair, freedom, and inspiration; its extents are ungraspable, evoking awe from the depths of human perception. As Edmund Burke explained the nature of the sublime:

Whatever is fitted in any sort to excite the ideas of pain and danger; that is to say, whatever is in any sort terrible, or is conversant about terrible objects, or operates in a manner analogous to terror, is a source of the sublime; that is, it is productive of the strongest emotion the mind is capable of feeling. I say the strongest emotion, because I am satisfied that the ideas of pain are much more powerful than those which enter on the part of pleasure…The passion caused by the great and sublime in nature, when those causes operate post powerfully, is astonishment; and astonishment is that state of the soul in which all its motions are suspended with some degree of horror.²

The sublime nature that is physically manifested within the desert is emotionally matched by the presencing of the dead. I shall use Burke’s description of the sublime to further link context and program, desert and cemetery. When addressing the nature of the sublime in regards to many degrees of human pain, Burke distinguishes pain as the most extreme sublimity:

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But, as pain is stronger in its operation than pleasure, so death is, in general, a much more affecting idea than pain; because there are very few pains, however exquisite, which are not preferred to death.⁴

Therefore, placing death (the most exquisitely sublime pain) within the desert (the physical sublime) thematically links the two.

In addition, if we look back to Harrison’s explanation for the “loss of place” within the Western world, we find further thematic precedent to place the cemetery within the desert. Harrison cites placelessness as a direct result of a current inability for people to remain in the place of their ancestors, the need for continuous relocation. Edward S Casey supports position in his book, “Getting Back Into Place”:

Human beings are among the most mobile of animals. We are beings of the between, always on the move between places. When one place threatens to become vacuous (uninteresting, unsatisfying, desolate, or empty), we hasten on to another. Pascal also remarked that ‘all of human unhappiness stems from one thing: not to know how to remain in repose in a room.’…Rushing from place to place, we rarely linger long enough in one particular place to savor its unique qualities and its local history. We pay a heavy price for capitalizing on our basic human mobility. The price is the loss of places that can serve as lasting scenes of experience and reflection and memory.⁴

The inconsistency of location throughout a lifetime facilitates the inconsistency of burial. People scatter and settle throughout many places, a result of the increasing ease of travel, and in turn their remains often lie separated from their ancestry or lineage. Therefore, if Western society has come to a point where generational burial is not possible within a single place, providing the cemetery with a place of its own will ensure elective cohabitation in death. The desert cemetery thus provides a consistent place in death, in spite of inconsistency in life.

The provided desert gave no formal human context for the scale of interplay between program and place; it only subtly evidenced natural systems and echoed human movement across

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³ Ibid.

⁴ Edward S. Casey, Getting Back Into Place. p. xiii.
the plane of the horizon. Instead, the desert environment provided a distinct phenomenological context for their projects—severe light, many depths of shadow, the burning of skin, significance of the stars, the exposure and freedom of isolation. The formlessness of the desert challenged the students to design architecture from specifically abstracted perceptions of the sublime, to establish place at a point within a territory. To return to the words of Casey, “To be in the world, to be situated at all, is to be in place. Place is the phenomenal particularization of ‘being-in-the-world’.” This project assumed the responsibility of providing this particularization. The desert offered a sublime context, funerary architecture established a place for the living and dead to dwell.

**Crossroads Narrative**

The initial step in locating a point at which to establish place began with a written crossroads narrative. The given circumstance was this: two characters are walking through the desert. They are alone, constructing a path across the arid plane, the consequence of a story to be unfolded. The narratives are an account of their intersecting situations, the series of events that led them to consequently forge a path through the desert. Each character moves along an independent trajectory—searching, relocating, escaping, fearing, rejoicing. Eventually, there is an intersection of the two paths, the crossroads. What events mark this intersection? How does this alter the characters, the paths? This initiative was the unfolding of this narrative, the specificity of serial events that placed each character within the desert. Perhaps they were series that began at birth, perhaps mere hours before they journeyed into the desert, in either case these established two paths (line) and a resulting intersection (point) within vastness of a territory (plane). From the associations between of these—point and line within the desert plane—place emerged.

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5 Ibid. p. xv.
The notion of a crossroads is both an ideological and formal indicator: an intersection of two trajectories, a dialogue of proximities, and a narrative moment within an unidentified matrix. Literally the intersection of two roads, it has become a metaphorical reference for many social, cultural, and even political circumstances. To place this within a notable literary context, let us look to the writing of Michael Serres, whose use of spatial operators will be addressed in detail within the following section. In his writing, Language and Space: from Oedipus to Zola, Serres addresses the use of the crossroads as both a spatial setting and narrative strategy in the story of Oedipus, attributing the crossroads with the execution of multiple operations. In the example of Oedipus, it acts as a setting, a symbol, and an indicator, each one marking a pivotal threshold within the story. The multivalency of the crossroads, therefore, offers the possibility of recurring at various moments within a story, seaming together a series of distinct parts into a singular itinerary.\(^6\)

During his journey and search for the truth behind his paternity, Oedipus encounters three specific crossroads\(^7\):

1. Oedipus kills his father at a physical crossroads; both seek control, though neither achieve control.

   There a road passes between two high rocks, as in a crevice or a narrow defile. Crossroads: cross, passage of a road across a ribbon that divides space, passing over a crack. Bridge: connection through the disconnected…To be the son or to place oneself at the crossroads: two bifurcations and two catastrophes that the myth joins together by its very word.

2. The sphinx is a symbolic crossroads; she propels Oedipus\(^\prime\) into the role of king and the prophesized husband of his mother, Jocasta.

   She [the sphinx] is a chimera, half-lion and half-woman; half four-legged, also, and half two-legged, and perhaps partly bird. She is a body sewn back together, badly sewn: two

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\(^6\) Michael Serres, *Language and Space: From Oedipus to Zola*.

\(^7\) The following three excerpts were found on page 9 of Michael Serres, *Language and Space: From Oedipus to Zola*. 
parts related by dichotomy, joined in the form of a chi, crowned by wings; she is a crossroads, with wings that protrude for one who no longer needs feet. The Sphinx is a bifurcation, and conversely. And the crossroads is a chimera.

3. The scar is a crossroads indicator; through this, the crossing of character narratives is revealed.

Oedipus is indeed the last descendant of the Spartoi, of disseminated spaces, of catastrophic separation, of the continuous that must be recovered. Everything is repeated once again when Jocasta recognizes her son by the scar on his feet, a scar in which the lips of a crevice connect.

In the character narratives, the crossroads were implemented as simultaneous resultant and generative operators; they resulted from the intersection of two characters, and in turn generated a point at which to establish place. Thus, the crossroads acted a threshold between narrative and form. The following are abbreviated examples of these student narratives:

Student Narrative: Trevor Boyle

Two souls wander the desert. One in search of beauty. The other in search of truth. Both quests seek the absolute. They seek the rawest form of their respective goals. Both quests require such a journey through the harshest terrain, for through hardships one stereotypically can find spiritual confirmation, and like coal under pressure one can find beauty in the most abrasive of environments.

The one who searches for beauty started its hunt only a year ago. Two years before that it was inspired by an inventive piece of artwork. This person, an average socialite with no previous taste for the aesthetic, was waiting for a little white man to pop up at a busy intersection in the downtown of a major metropolis center. Lackadaisically, he looked around in the large storefront windows. It was there that he spotted it. He looked at it, transfixed, for minutes. The little man disappeared and a Do Not Cross sign for the street he had been waiting to cross flashed and stopped. He was still looking at a painting. No, not a painting. The painting. It was indescribable, but simple at the same time. At some time, he finally moved. At least physically. To this day there is a small piece of who he is, standing at that intersection, staring off into the storefront…

The soul was overcome by its beauty. However, after admiring it for months the passion dwindled. Fleeting Beauty. But still, it came to that intersection, waiting for the feeling to return like one waits for a bus that doesn't come. Eventually, the soul moved on to other forms of art. It actively searched where art was to be found. But still the original feeling never returned… Which leads us, in this case, to the desert.

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8 The following two narratives were results of the Character Narrative assignment. They are the works of Design Four students Trevor Boyle and Chris Chappell, respectively.
Beauty is often found in the untouched nature. Space that has not been polluted, torn down, infected with fast food buildings like bacterium in an otherwise expertly designed and well machined organism. While there is a sort of ironic beauty in the spoiled, the soul in the desert has sifted through the garbage already, and has yearned for the opposite side of the spectrum. Not beauty in something grossly placed. Not beauty in traditional forms. Not beauty in things people have eternally designated as beautiful, such as rainbows, sunsets, and other postcard beauty. The soul searches for the most basic essence of beauty. Nothingness. Form at its more pure. No additives or extraneous measures. Nothing commercially designated. Simply beauty that can only be stumbled upon in the most secluded of areas. A statistical anomaly created by nature. A beautiful accident, that has had years of natural wear and time to shape. Something not created by man to mimic beauty. But instead the absence of this artificial creation. This is what the soul wanders this bleak wasteland for. A beautiful emptiness…

The one who searches for truth is no stranger to the subject. From the earliest days of self-realization, it has known the desire for something larger than itself. It is well versed in all religions, well visited to all religious centers. Whether it be God, or a Flying Spaghetti Monster, the soul has long searched for answers that science can't find and religion calls its own. But through all the submersion in all things spiritual, the soul has yet to feel that connection, that feeling of calmness and peacefulness that many religious figures have felt. Many questions, but not many answers…

As a child, she looked through workbooks her school passed out. They had many questions, plenty of questions, but no answers. The answers had to be supplied by the person who possessed the book. She was not interested in these people's questions. She had her own questions. What she wanted was answers. School could only provide a portion of what she wanted to know. There were still large gaps left over, important things that her professors could not give a definitive answer to. So she looked elsewhere…

Her home became a storehouse of religious literature. She studied every belief system to the smallest detail, hoping each piece would help her figure out the entire puzzle. But all the pieces were to different puzzles, like someone dumped pieces from multiple puzzle boxes into a single container she had to sift through. When nothing in her immediate environment could satisfy her craving for the Truth, she traveled. Each temple, each shrine, they all had a theory. But she did not feel the connection, that feeling that one has discovered actuality. She found plenty of paths to the truth, but no Truth.

Until, while studying the gleeful, pudgy face of a golden Buddha, the soul found in itself the path to the Truth. It was not the statue that inspired it, but instead the realization of a common theme it had come across in its studies. Instead of looking for truth in the external environment, instead of interviewing others for the answers, it realized that there was only one way to the place that this Truth could be found. And that was through oneself. Like the workbook that the soul was given in grade school, others could not be relied upon to answer the soul's questions for it. It would have to supply its own answers.

It is the discovery of this path to the Truth that moves the soul to come to the emptiness of the desert…
The soul takes a straightforward path through the blistering landscape. It does not concern itself with the physical objects around it. It is there to become one with the nature, not study its physical form. Its goals are in sight, and so the movement through the environment is only a measure for symbolically reaching a goal. Once again, there is no physical destination, simply a desired path through the nothingness. It is not a hurried pace the soul moves through, but it is constant. There is no reason to stop. To pause. This is not a journey about getting to a particular place, but it is about moving forward. And so the soul moves forward. Presses onward. Searching not the horizon for its answers, but searching within itself.

Student Narrative: Chris Chappell

Simon, the sixty-five year old, was born into a family that survived off the money they made from the lands they farmed. They were wine makers.

Each day they would wake up to the sight of the morning sun sneaking into the dwelling, all knowing exactly what the day ahead has in store. The same as the day previous. Simon’s rooster repeats to news the sun has already told them…

When Simon began making wine with his parents at a very early age, he was unable to connect on a friendship level with the kids at his school. He was highly teased by them for his low income background, and began to use the time mashing the grapes as an escape from the outside world. The secluded time of Zen used to clear his mind has proven to have helped Simon through hard times in his life but also helped to develop the well grounded mentality he has established for himself…

They had a family partnership with the bottling company located 7 miles east of Reno, Nevada. Simon’s family and the bottling company came to an agreement after many months of negotiations, and decided to partner in the profits. The bottle company was owned and operated by the former governor, Huckabee Grimes, of their area that wanted to begin a small business for a profit. The family came into frequent contact with the governor and decided to ask if they could use their service to help with their business. The family was already overloaded with the other tasks required, and could not afford to set aside time to bottle the product. The commissioner was reluctant at first, due to the nature of the reputation of small businesses being unable to hold their ground, but decided to do them a favor anyway.

As time went on, months of hard work paid off for Simon and his family. The local village that Simon’s family was a part of grew fond of their rich wine and later became the biggest consumers of their family product. However, as the popularity grew, production had to increase in order to fulfill a man-kind concept: Supply and demand. Simon knew the family’s land would need to expand in order to continue at the pace of their customer’s demand, so he decided that an expedition to find a larger plot of land for cultivation was needed.

…He took off the next morning right before the sun peaked over the horizon knowing that the journey he was about to take would be long and exhausting. However, he knew the
possibility of his family’s winery emerging into something much larger than it was currently rested on his journey.

The sand was unforgiving on his feet, as the sand’s temperature grew higher and higher each hour that passed. He continued regardless of the natural constraint and found ways to keep his mind at ease. The notion that he was experiencing a change in his routine-driven life gave him the motivation to press on, deeper into the desert…

Eight. That’s the number of years Steve has been selling pharmaceutical drugs to small companies around the great United States. He has a wife, Mary, in New Jersey with 2 kids, Pat and Riley. He is a business man at heart, which drives him to fly back and forth to California three times a week to meet with upcoming companies looking to buy into his ground-breaking medicines. He has grown quite the reputation across America not only because of the guarantee of a great product but also the quick delivery to his clients…

He loves to fly. Always has. As a child, he would always look forward to family vacations because his dad was a used cars salesman in the Panhandle of Florida. He would fly him and his brother to Destin for a week to relax on the beach. But the reason he looked forward to this event was the plane ride.

His fascinations with airplanes derived from his childhood and putting together model airplanes after school. He has always loved the concept of taking multiple pieces and putting them together to create something new. As he entered into his early 20’s, Steve decided to take up flying lessons to fulfill one of his many aspirations of his short life. It took him months to understand the basic procedures of flying, but slowly he progressed. He felt this would be a direct link into his career. He wanted something that would take years of teaching to understand but also eventually show a concrete product.

Steve was able to join a pharmaceutical company months after he graduated and continued to progress due to his ability to network with experienced technicians in the corporation. After only three years with the Walgreen’s pharmacy professionals in New Jersey, he felt equipped with what it took to start his own small business. He knew he was ready for the challenge, but stood at a stand still after hearing from a coworker the expense required to start a company of that caliber. Steve was determined to make this dream a reality…

Steve knew how much he had riding on this arrangement and chose to personally fly the new drug to the companies from New Jersey to San Juan, California. Rain and potential snowfall was projected in the area that he was headed toward but chose to fly his company’s two-seater personal plane. It’s a shame he never got to California…

**Mapping the Narrative**

The character narratives provided three fundamental Euclidean elements that directed the translation from written text into visual map: the lines of path, the point of intersection, and the plane of the desert. Through unfolding these, a basic situational diagram was formed. To further
articulate this and provide greater content of implied topology, we followed a conceptual foundation that Michael Serres calls the spatial operator:

I have at my disposal operators taken from naïve symbols, operators at work upon something unspoken (at least by philosophy), namely, the accidents or catastrophes of space, and at work upon the multiplicity of spatial varities. What is closed? What is open? What is a connective path? What is a tear? What are the continuous and the discontinuous? What is a threshold, a limit? The elementary program of topology.\(^9\)

Through this conceptual strategy, Serres reduces all spatial situations—both within literature and within the world—into seven symbols:

1. The bridge: a path that connects two banks, makes a discontinuity continuous, or crosses a fracture
2. The well: a hole in space…disconnects the connected, but also connects the disconnected.
3. The prison: the enclosed space
4. The hotel: the threshold, relay, or renewal
5. The labyrinth: the sum of all emblems…as much closed as it is open
6. Death: differs in at least one respect in that it is not an artifact…death is, but is not, all of that.\(^{10}\)

Serres then assigned specific spatial attributes to literary works through the use of these naïve symbols, the operators: “All are paradoxical spatial operators indicating that we have given short shrift to space, that we shall never be free of spaces. For this reason, all text holds spatial implications.” Likewise, the character narratives were translated into graphic mappings.

To specifically identify the transformation of narrative into mapping through these spatial operators, let’s consider the student text, “Two Souls.” The narrative begins by presenting the characters:

\(^9\) Michael Serres, *Language and Space: From Oedipus to Zola*. p. 6

\(^{10}\) Ibid. p. 4-5.
Two souls wander the desert. One in search of beauty. The other in search of truth. Both quests seek the absolute.

Immediately the similarity between the two characters, the bridge, was directly stated: the quest for the absolute. Establishing this connection so early in the writing provided the opportunity to further qualify the nature of the bridge throughout the remaining text. To continue, the search for beauty was initiated at a traffic intersection, when the soul spotted a painting in a window. He continuously returned to this place, a relay for his quest, the hotel within the narrative. The painting is a destination, a pause, and a threshold.

The character’s repetitious visits to the painting were replaced by inward and outward quests for unknown beauty, and the hotel was thereby transformed into a labyrinth:

However, after admiring it for months the passion dwindled. Fleeting Beauty. But still, it came to that intersection, waiting for the feeling to return like one waits for a bus that doesn't come. Eventually, the soul moved on to other forms of art. It actively searched where art was to be found. But still the original feeling never returned.

Here, within the first two paragraphs, we have identified three operators: bridge, hotel, and labyrinth. The use of Serresian spatial operators could likewise be applied to the remainder of the writing, each symbolic and narrative cue impregnated with spatial implications.

The image of the desert only suggested relative scale through traces of movement and wind, a subtle framework into which human scale could be ascribed. Consequently, the narrative itself determined human scale within the path. The line in the desert might express a journey of many months or several hours; pace could be marked according to steps taken or sunsets seen. Following the determination of human scale, the spatial operators layered qualifying information into the articulated paths and nature of the crossroads. They informed the graphic translation: the bridging of the search might be captured in line thickness or execution, relay and repetition might be suggested through markings or voids. Physical or emotional imprisonments that sped or slowed the pace might be indicated, along with events of disconnected connections, the well.
The conditions were manifested within a path, a multiplicity of conditions within the singularity of line. (Figure 3-2) What was the directionality of each path? How is each path measured? Time scaled? Where are the pauses? Rests? What defines the crossroads? How does this crossing alter the paths?

The paths were then constructed as the resultants of contextual articulation. Having defined the narrative information within the line of path, this incorporated specifically contextual information into the mappings. This further addressed notions of scale and time, layering in sublime phenomena and perspective cues. The desert was no longer a provided image, but a qualified environment. (Figure 3-3) What desert conditions impact the line of path? How does the desert affect their emotional context? When and why are they driven, hopeless, or lost? When does the character look toward the distance? Stop and see the stars?

Similarly, the horizon was constructed as a result of parts: the line of ground, the overhead plane of the sky, serial marks that measure of the character’s journey. In these, the acknowledgement of the crossroads was identified at a point along the section. (Figure 3-4) What is the experiential space between earth and sky? What are the journey intervals and changes in pace? What marks the crossroads within the horizon?

**Focusing Design Issues: Seeking Vernacular Cues**

The search for universal conditions that lie at the core of all burial-places must consider both the conscious and unconscious, the objective and subjective. Fundamental precedents have been previously addressed, but to truly study the nature of the cemetery, we must also look to those that have emerged from the unconscious human requirement, the vernacular cemetery. The cemetery cannot be comprehended through description alone, it must be visited, moved about, watched and touched. Placing ordinary vernacular alongside the extraordinary precedents offered a more encompassing strategy for identifying universal needs.
Bachelard as Model for Investigation

This investigational technique is founded upon the notion that one cannot examine spaces that are held intimately within the imagination and memory as objects of analytical scrutiny, but as evidence of significance to the being. This follows the guiding principles of Gaston Bachelard:

The images I want to examine are the quite simple images of felicitous space…They seek to determine the human value of the sorts of space that may be grasped, that may be defended against adverse forces, the space we love…Space that has been seized upon by the imagination cannot remain indifferent space subject to the measure and estimates of the surveyor. It has been lived in, not in its positivity, but with all the partiality of the imagination.¹¹

This theoretical position was a departure from the quantifiable research that occupied the early years of his career. Bachelard focused his later research to the impact and worth of the intangible realms of the human memory- daydreams, musings, and poetry. This, he asserted, is critical for the understanding for the human psyche, as it is the basis for the way we see space. He explains this research strategy in “Poetics of Space”, using the program of dwelling,

It is not a question of describing houses, or enumerating their picturesque features and analyzing for which reasons they are comfortable. On the contrary, we must go beyond the problems of description- whether this description be objective or subjective, that is, whether it give facts or impressions- in order to attain to the primary virtues, those that reveal an attachment that is native in some way to the primary function of inhabiting.¹²

This strategy is invaluable to the reconsideration of any deeply rooted human program, as it reaches toward the intangible factors and echoes of human memory.

Design Issues Focused

The challenge for the students was simple: visit and capture architectural conditions within local cemeteries and memorials. At this point in the project the cemetery program was revealed,


¹² Gaston Bachelard, Poetics of Space. p. 4.
though not specified. Introducing program at this point of the process offered many additional design issues. Therefore, it was critical that the issues be focused to facilitate the reconsideration of funerary architecture. The assignment was termed “seven avenues of seeking” and comprised of five visits (cemeteries, memorials, and funerary architecture) and two cultural findings (music, art, film, and literature). The method of capturing the conditions for a collective discussion was not specified, nor were the topoi yet provided. Instead, the search was prompted by a series of questions\textsuperscript{13}:

- How are the dead buried/memorialized?
- How to the living engage with the burial-place?
- How are the dead named, identified, or marked?
- What constructs the boundary between the dead & dead/ dead & living?
- What are the materials? Customs? Cultural and spiritual symbols?
- What do the living give to the dead? What do the dead provide for the living?

The distinction between these questions and spatial topoi lie in one critical fact: the topoi quantify relationships between the dead, living, and ground plane, the vernacular conditions qualify design issues. Without dictation of what must be found, the findings were responses to an inquiry, not proof of a predetermined set. Regarding the two research strategies, Bachelard wrote,

> In all psychological research, we can, of course, bear in mind psychoanalytical methods for determining the personality of a poet, and thus find a measure of the pressures- but above all of the oppressions- that of the poet has been subjected to in the course of his life. But the poetic act itself, the sudden image, the flare-up of being in the imagination, are inaccessible to such investigations. In order to clarify the problem of the poetic image philosophically, we shall have to recourse to a phenomenology of the imagination. By this should be understood a study of the phenomenon of the poetic image when it emerges into the consciousness as direct product of the heart, soul, and being of man, apprehended in his actuality.\textsuperscript{14}

\textsuperscript{13} The following questions were listed in the Seeking the Vernacular assignment given to the students.

The poetic act itself was the focus of seeking the vernacular, the product of man’s being. The findings were not from architectural designs, per se, but were nevertheless emergent from the motivations of a community, offering many implications that are useful to the critical designer. At the most elemental level, the issues fell into two types: spatial and temporal issues.

**Spatial Issues**

Any single spatial issue may be articulated in an unlimited number of ways, depending to the nature of the cemetery it is within. With nearly a hundred cemeteries and memorials explored in this investigation, the challenge was twofold: what do you identify and extract as architectural issues, and how might these become artifactual operatives to influence design? Visiting, capturing, presenting, then collectively identifying the consistent threads within the program led to two fundamental spatial considerations: boundary/edge and living/dead.

**Boundary and Edge**

The articulated boundaries of urban cemeteries are quite different than those within rural contexts. The thresholds, separations, and external boundaries directly affect the presence of the cemetery within its place. The cemetery territory might be strictly defined by a constructed edge or subtly implied, each suggesting potential limits and degree of containment. Accordingly, external boundaries and edges are fundamentally large-scale conditions, elements that form physical separations between cemetery and context. Identifying and qualifying the nature of these conditions is critical if one intends to utilize them as architectural indicators. How does the cemetery reveal itself within its context? Is the boundary formed by a harsh edge or gentle fade? Is it a monumental landmark? Concealed within a pocket of landscape? How does one step into, dwell within, or conceal himself from the cemetery?

In addition to external edges, internal boundaries are formed within many cemeteries. Whether separated according to family lineage, political classifications, or historical eras,
internal boundaries may be achieved through physical barriers, ground articulations, or distinct changes in scale. These boundaries are softer than those at the outermost perimeter, though they significantly alter the hierarchy and organization of the cemetery. What are the classifications by which the dead are grouped or organized? Are the internal edges implied through organizational strategies or the use additional elements? Are the boundaries traversable or isolating?

**Living and Dead**

In addition to the large scale conditions of physical boundaries, there are traces of smaller scale intimate boundaries: the relationship between the living and dead. Unlike physically constructed boundaries, the relationship between the living & dead do not exist within a physical realm, but within human consciousness. The emotional thresholds that connect the two realms are only suggested through traces of the living. Consequently, to identify the existence of these conditions, one must look for evidence of this cognitive boundary: how do the living visit, honor, and maintain the graves of their dead? How do the living approach? How often do they visit? How long do they remain? What do the living leave at the graveside?

The objects left at the grave- whether flowers, stones, toys, or letters- are artifactual clues to the dead’s pastimes, nationalities, or spiritual beliefs. In addition to a cultural expression of the dead, these gifts also provide evidence of the timing and frequency of the living’s visits. Fresh flowers indicate recent visitation, faded flags show the wear of a long absence. Therefore, the aging and weathering of these offerings, along with the object itself, indicate the emotional boundaries that remain in the human consciousness.

However, it is not only the living that provide for their dead. To consider this relationship inversely, there are many circumstances that imply the dead reaching toward the living world. Graves provide places to sit beside, to worship within, and to someday be joined in death. Through this, an additional dimension arises between the living and dead, for it no longer exists
within the plane of the imagination or in the offering of perishable objects, but is concretized in space and architecture. While cemeteries inevitably imply the scale of the coffin, this circumstance also provides elements that are scaled to the living’s activity. As a result, there remains a juxtaposition of permanence and temporality, revealing the secrets of the intangible boundaries and quiet exchanges between the living and dead.

**Temporal Issues**

The second set of issues that were identified during the collective focus involved temporal issues: planned/emergent and ageing/weathering. The rudimentary question that recurred throughout these investigations: how does the cemetery function as an artifact of society? Answering this question identifies the cemetery’s historical timeline, which in turn offers historical clues to the place itself. It is important to understand the history and development of a place in order to ground future propositions, but how does this past surface within the contemporary place? How might the palimpsest of the cemetery offer up the secrets of its history?

The derivative of this question arose from the study of Colonial Park Cemetery, located in Savannah, Georgia. During the initial European settlement, a strict grid system was established to ensure the ideal military defense strategy. This complex array of wards provided multiple scales of circulation, space for cattle, and gathering places for the community. The settlers located their cemetery off-module, just outside the perimeter of the original six wards in order to prevent ground contamination. This was intended to prevent the cemetery from impacting the city. However, over time the urban grid extended, swallowing the cemetery and adjusting to the break of the infrastructural grid. A program once tangent to the city edge now lies at the core, permanently impacting the way the city moves around it and the scale of the surrounding urban
space. It is a disruption that whispers Savannah’s history and the memory of the original six wards.

The interdependency of the cemetery and its context provides an opportunity to investigate one through the other. Understanding the programmatic adaptation or spatial reconsiderations that each experienced in order to maintain this connectivity gives information to the nature of the place itself. Therefore, identifying these elements, the temporal issues, are a critical step in the vernacular investigation.

**Planned and Emergent**

Identifying the difference between the planned and the emergent cemetery indicates a great deal about the timeline of the cemetery: its point of establishment along its context’s timeline, the current activity or inactivity, and the collective characteristics of the dead themselves. Is the cemetery contained within buildings or sprawling within a landscape? What spatial conditions indicate contextual history? Are the edges fixed, locked, permeable, infinite? How do the organizational strategies reflect the dead within?

To juxtapose two extremes, a military cemetery (the planned) with one that slowly surfaced over hundreds of years (the emergent), many organizational distinctions arise. One example is body arrangement within the military cemetery: soldiers rest in consistent rows, equal in distance, identical in marker. Burial within the military context labels them forever as a soldier and as such they will be honored as a collective unit, not according to individual characteristics. Contrasting this condition is the emergent cemetery, established and extended alongside the growth of the context. Without population certainty, a defined perimeter, or similarity of dead, the tombstones are likely to assume various arrangements, materials, and measures; it grows concurrently with its context. As technology provides new methods, the
proportions and markings continuously adjust and meet the standards of the time; it is within this cemetery that generational separations are quite evident.

**Ageing and Wearing**

Traces of time are evident through the ageing and wearing of the cemetery. Tombstones are overturned, the consequence of vandal or foundational forces, carvings and ornament are eroded after many years of exposure. Markers are constructed of stone to retain the permanence of eternity, yet in this permanence is proof of temporality; they inevitably exist upon an earth in a continuous cycle of reclamation.

The aged cemetery results from the complex intersection of cultural consciousness and environmental impacts. The funerary ruin is indicative of time and emotional distance, resulting from human abandonment and facilitating human disregard. Harrison explains this human fascination, as both inevitability and hope:

> The spectacle of ruins reveals the fact of destruction, yet at the same time it also reveals the fact of survival- the survival not so much of the ruins themselves as of the earth on which they stand or fall. I have insisted from the start that this is the true correlation: time and earth.  

Ruination can be either beneficial or detrimental to the impact of funerary architecture, depending on its intended strategy. Therefore, identifying the process through which the earth reclaims the cemetery will indicate the opportunities to resist- or embrace- this phenomena.

**Pedagogical Translation**

The subject of funerary architecture within the research framework continually returned to the fundamental relationship between the living and the dead. The seam between these two dimensions may be a physical boundary between two worlds, a threshold into the emotional consciousness, or simply a necessary human institution. Therefore, architecture must be initiated

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and developed according to this relationship; it must be a place for the two to merge. Robert Pogue Harrison stated:

> If a house, a building, or a city is not palpably haunted in its architectural features— if the earth’s historicity and containment of the dead do not pervade its articulated forms and constitutive matter— the that house, building, or city is dead to the world. Dead to the world means cut off from the earth and closed off from its underworlds.  

This project was intended to prevent this segregation, to integrate the world and its underworld. Accordingly, the project was entitled “the burial-place: marking, holding, and sojourning with the dead”, as it addressed the living and dead as a juxtaposing but interconnected pair.

The purpose for the specified program was to establish a place of temporary co-dwelling between the living and the dead, a consistency of burial place for an indeterminate society. Therefore, the burial-place was designed according to its experiential impact on the living, supplemented with programmatic components that provide for the living human ritual. How would the dead wish to permanently dwell? How are their markings influenced or facilitated by the desert? How does the experiential richness warrant the desert journey? How is memory captured? The program is as follows (Figure 3-5):

- Two burial-places, based on individual narrative translations
- One gathering space (public)
- One meditation space (private)
- One series of twenty dwellings (extended pause)
- One additional programmatic component of choice

This point in the project afforded two articulated contexts: the character narratives and the physical mapping, conceptually integrated but procedurally distinct. Just as the mappings were a formal reconsideration of narrative, the spatial qualities of the two burial spaces were translated

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16 Ibid. p. 36.
from a qualifying aspect of each character. Was the character grounded, internalized, or meandering? Did he bridge two cities, venture out in a lofty pursuit? How can these characterizations and motivations imply space or itinerary, the way one experiences the cemetery? This is the moment of architectural translation:

A place emerges from the crossroads, a burial-place for the dead. Perhaps a place of happenstance death, a place to return for the act of dying, or a relocation of such; regardless, it is simultaneously the conclusion of a narrative and a beginning of a sojourner’s place. It holds & honors, remembers & envisions.17

Situating Program and Itinerary

There were many issues that provided architectural directives: a scaled mapping with an articulated itinerary, a horizon with imbedded phenomenological conditions, a series of vernacular cues, and highly developed character narratives from which cemetery typologies may be defined. Situating the program worked within this complex framework; the students identified the conditions within the array that pertained specifically to their focus, weaving these with their programmatic proposal.

This step is simultaneously the culmination of the narrative processes, the initial architectural suggestion, and a proposal of creating that seam between the living and the dead.

Returning to Serresian principles, this is the step for the weaver:

One must find the Weaver, the proto-worker of space, the prosopopeia of topology and nodes, the weaver who works locally to join two worlds that are separated, according to the autochton’s myth, by a sudden stoppage…He untangles, interlaces, twists, assembles, passes above and below, rejoins the rational, the irrational, namely, the speakable and the unspeakable, communication and the incommunicable. He is a worker of the single space, the space of measure and transport, the Euclidean space of every possible displacement without change of state, royally substituted one fine day in place of the proliferating multiplicities of unlinked morphologies. In order to practice dichotomy and its connected paths, one must know that its clefts follow and overlap the ancient mythical narrative in which worlds are torn asunder by a catastrophe- and only the Weaver knows how to link

17 Direct quote from assignment. (appendix)
them again or can reunite them. Then and only then geometry is born and myth falls silent.\(^7\)

In this situational proposal, the itinerary and horizon dictated the programmatic placement. How does the sojourner reach the dead? What is his proximity to the indwelling? What are the perspectives? What is the experiential impact of the burial determine its relationship to ground?

In the given student proposal (Figure 3-6), the cemetery is submerged into the ground, bodies placed into the wall beneath the desert plane. Controlled sunlight pierces into this chamber, lighting only a single grave at a time: each body owns a moment of the day. The sojourner moves along an itinerary, an orchestrated exchange of exposure and protection, to reach their dead at their precise moment. The cemetery is reached after an hour’s walk.

**Living, Dead, and Phenomenological Light**

Concurrent to the weaving of programmatic situations were the phenomenological propositions. At this point, the vernacular images were categorized into their respective spatial topoi, each student having identified the architectural implications in each of their images. Understanding these- the relationships between the dead to ground and dead to living- the students could reconsider funerary architecture.

**Light as Marker and Indicator**

Through a series of light studies, the students choreographed the interplay between light, space, and phenomena. How does light articulate the experience, lead an itinerary, and indicate the dead? What is the light of silence? Of reverence? These studies proposed the incorporation of light as a phenomenological tool, as it fell along the horizon paths and marked the presence of the dead.

\(^{18}\) Michael Serres, *Language and Space: From Oedipus to Zola*.
This step orchestrated the relationship between the living and dead, engaging the phenomenological impact of the desert. Regarding the richness of phenomenological conditions of the desert, Paul Shepard wrote,

> The desert is the environment of revelation, genetically and physiologically alien, sensorily austere, esthetically abstract, historically inimical...Its forms are bold and suggestive. The mind is beset by light and space, the kinesthetic novelty of aridity, high temperature, and wind. The desert sky is encircling, majestic, terrible. In other habitats, the rim of the sky above the horizontal is broken and obscured; here, together with the overhead portion, it is infinitely vaster than that of rolling countryside and forest lands...In an unobstructed sky the clouds seem more massive, sometimes grandly reflecting the earth’s curvature on their concave undersides. The angularity of desert landforms imparts a monumental architecture to the clouds as well as to the land...To the desert go prophets and hermits; through deserts go pilgrims and exiles. Here the leaders of the great religions have sought the therapeutic and spiritual values of retreat, not to escape but to find reality. 19

In the light studies shown in Figure 3-7, light becomes a component within the architecture, implying a threshold. Its impact on the itinerary corridor continuously transforms, distinguishing moments throughout the day and emptiness at night. The slight proposal shown in Figure 3-8 captured the quality of a submerged plane of the dead. This cemetery is carved below the ground surface, placing the sojourned living below with their dead. Streams of light pierce the ground plane above, marking each burial site. From the living world, the cemetery is only recognizable through a grid of perforations on the desert floor.

**The Layered Ground**

The layered ground was initiated by the previous articulations (Figure 3-9). Place emerged from the mapping and programmatic situations, space was qualified through the light studies, and altering skies marked of bodies. This first constructed ground was a three dimensional delamination of these layers. As evidenced in the image below, paper was structured and held by the wire framework, allowing the layers to float and weave together in space. The wire was a

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physical manifestation of drawn construction line: measure, pace, and path were translated into this framework. Light revealed depths of earth, slipping of layers, and weaving of program. The paper was the earth, joining with the sky, accepting the architecture. How do the layers of ground conceal and reveal the dead to the living, living to dead? How is the experience of the living and dead woven, directed, and contained by the ground? What is the depth of the seams between the two worlds?

Ground Articulation: Seaming Two Worlds

The spatial topoi identified ground as the primary mediator between the living and dead. While their diagrams represented this element as a single thin line, in reality ground is incredibly dynamic, with depressions and swellings from various forces. It constantly shifts, solidifies, holds, and reveals. While it is quite common to see the living carve into the ground for structure and infrastructure, carving upward from below is rarely considered. This exercise recognized ground as the result of two inverse worlds.

To refer back to Calvino’s twin cities:

What makes Argia different from other cities is that it has earth instead of air. The streets are completely filled with dirt, clay packs the rooms to ceiling, on every stair another stairway is set in negative…From up here, nothing of Argia can be seen.20

The Thick Plane

The thick plane (Figure 3-10) accounts for this dual impact: the living carving into ground, the dead carving toward the sky. Beginning with a single sheet, each side of the plane is built up and carved into, worked and reworked from both sides. The students were thereby challenged to equally consider the program from above and below. The resulting plane held many depths,

scratchings of movement, thin perforations, and pockets of space. It was the manifestation of the boundary between the living and the dead, into which architecture could be placed.

**Perspective Proposals**

With the ground plane articulated, the desert contained the scale of the person, the placement of the cemeteries, and suggested exchange between living and dead. The architectural components that accounted for the imprints were then initiated through a series of perspectives. Using photographs of the thick plane exercise, the students proposed space and form: architecture locking into the desert, architecture folding out of the desert. Into these photographs they inscribed notions of overhead, materiality, and measure. Decisions about surface, view, proximity and relative scale preceded technical scale, which focused the design on qualities of space. Thus, itinerary and phenomena were the foremost influences on the architectural language.

Figure 3-11 presents a series of proposals. The first example within the set expresses a ground carved to several depths, spatial responses to programmatic placement. A constructed floor sits within the deepest carving, offering the foot a reprieve from the scorched earth. This is the ground fragment of an embedded refuge. The sojourner dwells within this space, and then is returned to the desert proper through a single wall that disappears into the earth. The two remaining perspectives address the overhead condition as it responds to spatial thresholds. Notice the juxtaposing edges expressed in the third perspective. The edge for the living (left) falls along the itinerary and is protected by shade, while the edge for the dead (right) pulls away from the path and is fully lit by the sun. This contrasts the act of seeing/moving with the act of and being seen/contained, expressing the exchange between the constructed and carved. Form, enclosure, exposure, and thresholds are proposed through these perspectives. How do the living
move through the burial-place? How are the dead revealed to the living? How do they touch? What is the juxtaposition of scales between the living and dead?

**Pedagogical Product**

**Reconsidered Spatial Topoi**

Through the described methods, each student determined the nature and spatial execution of their burial-place. The precise space and tectonics of the architecture were resolved through a series of drawings and models, which addressed all programmatic components. The final body of work constituted an array of possibilities that did not strictly adhere the spatial topoi, but transformed them through experience and ritual. The following projects exemplify each topos, achieving the typology of the cemetery through the translation of a designer. Following the reconsidered spatial topoi, I shall present three additional projects in greater detail.

**The constructed cemetery.** The constructed cemetery constitutes the most singular typology; it is identifiably an object within a field. The constructed cemetery reconsidered, therefore, is expressed in the same manner. In this burial-place, the itinerary approach is neither prescribed nor specific, but is suggested only through the tracks of those who have traveled before. The approaching sojourner sees the desert floor fold upward into a constructed object in the distance, the confirmation of a successful pursuit (Figure 3-12, A). However, this construction does not hold the body of the dead, rather it floats above the living and dead, sheltering all programs beneath a single common roof. The dead rest within a single thick wall beneath this floating overhead (Figure 3-12, B). The reconsideration of this spatial topos lies in the monumentality, or rather anti-monumentality, of the burial. While the approach presents the burial-place as a constructed object, the experience of this containing wall is rather intimate, cradled within the folded roof and carved earth. The dead are not identified through nameplates,
but through the etched sentiments of the living: it is a wall that is constructed to be worn. Thus, the dead are only presenced through the sojourners who travel to honor them.

The cemetery plane. The cemetery plane was the most commonly incorporated cemetery topos, as is the case in contemporary western society. This particular burial-place, however, scripted the experience of the plane through varying relationships between body and grave. In this, the sojourner moves between programmatic components that interlock at a centralized “programmatic knot.” Moving along the intersecting itineraries, the depth of the path rises and falls, offering changing perspectives of a consistent horizon (Figure 3-13). Walking through the deepest level of path, therefore, would place the dead beside the living, an unlikely body alignment for this spatial topos. At the moment the eye breaks the surface of the ground plane, the desert horizon infinitely extends, providing experiential continuity with the markers of the dead. The success of this cemetery reconsideration is not achieved through redefining the grave, but through repositioning the eyes of the living.

The urban cemetery. The duality that exits within this urban cemetery is not achieved through the placement of dead above and below, but through the density and the duality that was achieved above and within. In this reconsideration, towers of dead sit within an underground chamber. The sojourner travels through a series of alleys to visit the dead, which rise above him on either side (Figure 3-14, A). Sunlight pours in through a layered overhead plane, drawing the eyes upward. In contrast, the living programs lie above the ground, viewing the dead only through interstitial reveals and a constructed roof within the seamless horizon. In sunlight, the graves below are quietly suggested, though night offers a heightened awareness, as the chamber is lit and light pours upward. In the darkness, the dead lie unmistakably below (Figure 3-14, B).
This duality, the eyes directed upward by day and downward by night, along with the burial chamber’s density, categorizes this burial-place as an urban cemetery reconsidered.

**The invisible cemetery.** The invisible cemetery reconsidered does not mark the location of the dead, rather it memorializes the human ritual of honoring the dead. In this, the graves are placed at the end of an hour’s walk, quite removed from the living program. The sojourner follows each of his visits to the burial-place by returning to the dwelling and planting a single cactus in the desert field (Figure 3-15) This act provides new life and marks each journey. It is this extending field that embodies the invisible cemetery, as the reconsideration is achieved through the presencing of memories, not the presencing of the dead. It is a sublime territory, offering visual evidence of invisible memories.

**Student Work: Aniel Martinez**

The initial inspiration of this final project arose from the directive of a roadside memorial. In these, the location of a death is memorialized through a marker or cross that is placed at the site of the car crash. The juxtaposing perspectives of the living and the dead- the static and the dynamic- inspired the spatial expression of this project. The roadside memorial typically occurs along an open stretch of road. Consequently, the living experience this memorial as a point along a trajectory, with little or no time to pause for an exchange between the two. Reversing the perception from the passers-by to the memorial itself, we may inversely understand the living trajectory from the static dead. This offers two methods of qualifying the relationship between the living and dead; although the components are exactly the same, the shifted perception evokes a dual effect.

This concept was translated from the ideology of perception to a constructed architecture through this- the two understandings of the place for dead. The first comprehension of the dead was achieved through a high wall that initiated an elongated axis. In this, bodies are stacked at
an exaggerated height, a thick edge that draws the living along a single line of path, the
trajectory. The wall reveals a path, conceals and shields the living program, and offers one
perception of the dead: beside and along the trajectory of the living. The termination of the wall
constructs the experiential exchange; an exaggerated wall concedes to an exaggerated ground.

At this point, the cemetery shifts to an entirely different nature of cemetery, a vast plane of
graves. Within this plane, a field of markers extends into infinity, offering a delicacy of presence
and vastness within the horizon. This field of markers structures an architectural plane that peels
from the earth’s surface, the ground offering the presence of the dead below. The living may see
the module of coffin below, yet maintain the separation through its concealed surface. This
cemetery captures the exchange between two perceptions of the singular realm of dead.

**Student Work: Chris Chappell**

This second final project maintains exclusively the *dead beside* relationship. The primary
distinction between this and other cemetery proposals lies in its gift to the living, a well that
provides water to desert dwellers. The cemetery is organized around a central spring that offers
nourishment is all living, not just those who come to visit buried loved ones. Therefore, the
impact of this cemetery lies not in the intimacy of personal relationships, but in that the
collective dead providing life to the collective living. The architecture physically structured by
the dead, who are embedded within walls that retain the desert sand and organize space. It is both
a physical and poetic relationship that is maintained between the living and dead.

The relationship between water and death was expressed by Gaston Bachelard in his book,
“Water and Dreams”:

> Water is truly the transitory element. It is the essential, ontological metamorphosis
> between fire and earth. A being dedicated to water is a being in flux. He dies every
> minute; something of his substance is constantly falling away. Daily death is not fire’s
> exuberant form of death, piercing heaven with its arrows; daily death is the death of water.
> Water always flows, always falls, always ends in the horizontal death. In innumerable
examples, we shall see that for the materializing imagination, death associated with water is more dream-like than death associated with earth: the pain of water is infinite.\textsuperscript{21}

This is a project that allows the permanence of death provide a space for a continuous flow of water, finite boundaries to in infinite cycle.

\textbf{Student Work: Carolina Valladares}

The juxtaposition between two cemetery positions- the horizontal and vertical- charge the overall diagram of this project. The articulation was born from an ideological position on the relationship between the living and the dead. The horizontal cemetery (Figure 3-18) draws from the notion that the dead dwell in the same fashion as the living. It was therefore critical to similarly articulate the living and dead dwellings, to align the two overheads with the desert plane. Further expressing the likeness between the living and dead is the upright positioning of coffins, with the dead held as they were in life.

Separated from this horizontal plane of dead is the tower of dead. Founded upon the notion that the true celebration of life begins in death, a glass tower rises from the carved desert floor, supported by a series of glass columns. It is not the intention to mark the human proportion in this cemetery, but to contain the ashes of the dead, placed into the glass columns by family. Through this, the striations that occur along the height of the columns present the history of a family, a timeline of members etched into the glass.

Together, this cemetery pair addresses the poetics of the dead to dwell beside and structure the celebration of the living. Acknowledging the interplay between point (dead), line (tower), and plane (horizontal), the spatial components provide a dynamic expression of the relationship between the living and dead.

Figure 3-1. Provided image for sublime desert. (Captured from Google Earth 3/01/08 by Kelly Ard)

Figure 3-2. Mapping the path through the line. (Drawing by Aubrey Charette)

Figure 3-3. Mapping the path through the context. (Collage by Crystal Torres)
Figure 3-4. Mapping the path through the horizon. (Drawings by Jennifer Gobitz)

Figure 3-5. Programmatic Components. (Diagram by Kelly Ard)

Figure 3-6. Programmatic Situations. (Drawing by Aubrey Charette)
Figure 3-7. Light as threshold. (Light studies by Jennifer Gobitz)

Figure 3-8. Light as marker. (Light studies by Nick Brow)

Figure 3-9. Layered Ground. (Model by Carolina Valladares)
Figure 3-10. Thick Plane. (Model by Clay Anderson)

Figure 3-11. Perspective Proposals. (Perspectives by Chris Chappell)

Figure 3-12. The constructed cemetery reconsidered. A) model B) section drawing (Drawing and model by Lauren Sajek)
Figure 3-13. The *cemetery plane* reconsidered. A) model B) section drawing (Drawing and model by Clay Anderson)

Figure 3-14. The *urban cemetery* reconsidered. A) section drawing B) model (Drawing and model by Michael Hilchey)
Figure 3-15. The *invisible cemetery* reconsidered. A) mapping B) model (Drawing and model by Aubrey Charette)

Figure 3-16. Martinez final cemetery design. (Model by Aniel Martinez)
Figure 3-17. Chappell final cemetery design. (Model by Chris Chappell)
Figure 3-18. Valladares final cemetery design. A) model B) drawings (Model and drawing by Carolina Valladares)
CHAPTER 4
CONCLUSION

We ought to reestablish the cult of the dead. Such a step may seem old-fashioned for an era that treats death with so much secrecy, so much dissimulation, so much awareness of its uselessness. With so much fear, in short…We ought to honor the dead. Not so much for them but for us. -Rafael Arfullol

It was the intention of this architectural thesis— from its conception— to identify the context of historical/ cross-cultural cemetery typologies and formulate proposals for its reinstitution into contemporary Western culture. What is nature of the seam between the living worlds, and how might the architect influence that seam? How might the architect design according to living/dead relationships, transforming the experiential impact of what the vernacular has already achieved? This is not research about a singular answer, but the series of questions that must precede the architectural formulation. How must we seek to thoughtfully articulate this final dwelling-place?

At the depth of all questions and provocations lies an intimacy that I find absolutely critical for the future of architecture: how does the architect use the people, customs, and environment around him to construct for the human condition? Architecture affords the opportunity to re-invigorate the content and craftsmanship within the built environment. The world we construct becomes context for life, and as such we must be accountable to- and rigorously involved in- the people for whom we build. This thesis uses the cemetery to begin this conversation, as it is a program that has experienced countless fluctuations, yet remains an essential human requirement. Ken Worpole explains the growing silence that pushes the cemetery to the periphery of architectural consideration:

Today, many architects seem silent on the matter of death; landscape designers only slightly less so. Spiritual matters don’t come easily to professions and practices that are increasingly computer-scored, technology driven, and which too often stand aloof from the

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quotidian forms of life and ritual. In an increasingly competitive global economy and culture, the big statement has replaced the thoughtful one, and size has often triumphed suitability. The human scale of design- and its attentiveness to the cycles and rituals of human life and vulnerability- has been squeezed to the edges.²

As this program was given to students to be incorporated within the desert landscape, there were certain scales and spatial notions that were dictated by site. The pedagogical implication of this is that the cemeteries would be articulated quite differently if the project were placed within a dense urban city, a rainforest, or a valley community. The diagrammatic typologies- the spatial topoi- are inclusive of the many cultures and environments throughout time. Therefore, the reconsideration of burial could transcend place and become manifested through a variety of configurations. Furthermore, there was no dictation during the design process of which spatial situations must be used; the students were free to propose the cemetery according to their individual narrative process. The results were thus concentrated within the dead below/ dead around themes. Had this process initiated within a dense urban matrix- not an infinitely sublime open terrain- the incorporation of spatial themes would have doubtlessly provided different proposals. This is expected, and what I find to be the required specificity for the integration of architecture, space, program, and site.

To conclude, there are three things that have repeatedly emerged through the research and design that capture the programmatic impact of the cemetery: (1) there is an intimacy shared between the living and the dead that spatially, traditionally, artistically, and emotionally determines the qualities of the living culture (2) there remains an unspoken- and perhaps unacknowledged- importance in the way the dwell in regards to their dead, and (3) the nature of the marker, the artifact, and the space of the dead provide traces of memory and the relationship

² Ibid.
that seams the living and dead. It is for these conditions that the reconsidered cemetery must be integrated within the discipline of architecture.

The architecture of death has both to remind us of the longevity of memory and human culture, as well as the brevity of the individual human life; to reflect on and respond to the febrile and at times explosive concatenations of history as well as the more reassuring temporalities of the seasons and the natural world generally. It has also to articulate the connection between the world above ground, and the world below.\textsuperscript{3}

\footnotesize{\textsuperscript{3} Ibid. p. 80.}
LIST OF REFERENCES


BIOGRAPHICAL SKETCH

Kelly Jean Ard graduated from the University of Florida School of Architecture with a Master of Architecture in 2007 and a Bachelor of Design in 2005. Her interest in the intangible experience of human memory and the value of seeking vernacular cues directed much of her research, specifically this thesis and her master’s research project, which focused on memory and dwelling-place. She further explored these interests through her pedagogical studies, working with students to re-present ordinary program through the celebration of phenomena and experience. Currently residing in Boston, Massachusetts, Kelly works for designLAB architects, an office that offers her the opportunity to put her specific interests into practice.