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I, David Burwinkel, hereby submit this original work as part of the requirements for the degree of Master of Architecture in Architecture (Master of).

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Death and the City

A thesis submitted to the
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Abstract

This thesis examines the role of death within the urban context and the potential benefits of translating our outlook on loss and grief into a positive catalyst for community building, place making, social equity, and personal growth. Our fear and discomfort with death, along with issues of land value and hygiene have moved facilities dealing with death to the urban outskirts. Edwin Heathcote's book, *Monument Builders*, identifies our culture’s growing reluctance to recognize death as an eventuality, and therefore why architecture dealing with death tends toward the “unobtrusive” and “bland,” the merely simple, or pleasing. This thesis challenges these contemporary approaches to the placement of death in our psyches and in our cities.

By standing prominently in the Chicago Harbor, this public crematorium design presents death and architecture not as something to fear but rather as a positive impetus within our personal lives and urban communities. An elaborate architectural sequence is developed out of three overall strategies: tectonics, celebrating the unseen, and poeticized meaning. Variations among these themes are sequenced and choreographed to create a powerful, meaningful and emotionally charged set of architectural forms and experiences. The intent is to create a profound and lasting experience for the individual mourners so that they might mitigate the stages of grief, prioritize their relationships, focus their goals, and strengthen their sense of connectivity and belonging to the community.
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**Introduction**

Death has increasingly become an uncomfortable topic in contemporary society; it is something that we avoid or ignore whenever possible. Author Edwin Heathcote explains this condition: “Death has no place in a society which is obsessed with youth and vigor; it has become taboo, and the art of expressing death has suffered deeply. Memorialization has become a branch of catalogue shopping: funeral homes increasingly resemble shopping malls in their ambience and muzak-rich atmosphere... A place for the contemplation of death is a fundamental adjunct to every town. The churchyards used to be at the heart of the settlement, but the cemetery is now usually on a ring-road or by-pass, accessible only by car. Death has been torn out of the heart of the city and a significant part of the city has died as a result.”

In his book *Last Landscapes*, Ken Worpole echoes Heathcote's concern by observing that historically, places of burial were integrated within the urban fabric, but that our growing discomfort with death, in addition to modern funeral practices, has led us to displace these places to the urban fringes and suburbs. Worpole urges that "unless planners, architects and landscape designers take seriously the issue of how to create new kinds of cemeteries within the weave of the modern urban fabric, there is a real danger of creating cities without memory, cities in denial of death and humanity.”

This thesis explores the potential of shifting the geographical place and social role of death within the urban context, the hypothesis being that the trauma of death can be transformed into a positive catalyst for community development and personal improvement.

Over the course of the last couple decades, many cities have experienced loss of the integrity of their internal neighborhoods, in addition

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to their tax base, with the exodus of the masses to the suburbs. Today, many cities are undergoing revitalization efforts, trying to attract corporations and young talent back into their folds by making themselves more desirable. We see this trend predominantly occurring within the entertainment districts. These revitalization efforts are economically effective, however, the population attracted by such efforts is transient and unlikely to stay long. In reality, those attracted to the city will switch jobs or move to the suburbs to raise a family. This gypsy population has no investment in the city and is unwilling to commit any time or effort into its upkeep and improvement. The temporal nature of the residence also implies that there is no sense of community, tradition, memory or culture within the different regions of the city and, as a result, no sense of place.

Ideally, cities are looking to reinvigorate their neighborhoods by drawing a more permanent population back from the suburbs through certain social and community initiatives, such as live-work and age-in-place. However all-inclusive or life-cycle conscious these efforts may be, they do not consider or provide for the eventuality of death. The facilities for handling the deceased exist primarily outside the urban perimeter, in the suburbs. The contemporary cemetery is essentially a miniature model of a suburban development. This bucolic escapism is a perpetuation of the suburban ideal as well as a denial of the city as a true home.

Shifting death from the suburbs to the urban environment will provide an essential service and complete the circle of life within the city. Creating a monument at the heart of the city to commemorate and lay to perpetual rest Chicago’s deceased citizens will give the surviving loved ones a greater sense of connection, ownership and value in their community and the geographic location. It is also a chance for the city to create value for its members by going the extra mile in their time of need. The ownership felt by the surviving loved ones will strengthen their connection and loyalty to the city as well as provide a human history and memory in the community. Death is also a great social unifier and equalizer because it is the fate that all share, despite differences in religion, status, race and politics. In the face of death, all of these differences melt away. Loss is an emotional upheaval that we can all empathize with and it is at such times of loss and need that the best side of humanity is often revealed. The shift of death from suburbs to city can also provide an opportunity for personal improvement; death is often traumatic and marks a period of great sadness for loved ones, but it can also be liberating. The grief of loss can temporarily disarm us, breaking down our barriers of self-absorption and enabling us to connect in ways not previously possible with our family, friends and community. Death can also provide perspective; it is often a period during which false pretenses dissolve, and it is made apparent which relationships, values and priorities are sincere and consequential, helping us to focus on those aspects of our life which fulfill us, while allowing us to shed those that cause unnecessary stress.

The architectural intent of this thesis is to create a crematorium on the Chicago harbor. As previously discussed, this space should not be one that causes discomfort to the inhabitants of Chicago, but rather, one that helps to foster a stronger sense of belonging and interconnectedness within interpersonal relationships and the larger community, while also serving as
a catalyst for personal growth and improvement. The aims of this thesis are furthered through use of program, site, orientation, thresholds, detail, material, lighting and form.

The spatial design of the Chicago crematorium seeks to help individuals cope with their grief in its five stages: denial, anger, depression, bargaining, and acceptance. One of the most effective means of helping those experiencing grief in all its stages is to connect them with their support group. This gives those grieving the opportunity not only to be comforted, but also to give comfort to their fellow mourners. Externalizing their emotions and telling their story validates their loss and helps them to vent the self-destructing emotions of denial, anger, depression and bargaining. We begin to move toward acceptance when we can get outside of our own emotions and be a source of comfort and support for others. The program spaces create a flexible scale of nodes that facilitate gathering at different levels of intimacy. This gradient is to afford those grieving space to express their emotions in a comfortable setting. These moments of human interaction are important for overcoming grief, strengthening relationships and creating a sense of value and belonging through community on a personal level. This same dialogue is also encouraged in the larger spaces on the city scale. This interaction is expressed spatially through the nodes in which the mourners interact with other groups of mourners, visually with the city and its people or physically through burial of their loved ones’ remains within the community.

The programmatic and spatial sequence is designed to accommodate three levels of interaction: individual, group and community. The experience of the individual and their emotional journey is the foremost focus of the composition. A community is the composition of its members, so without a strong bond at the human level, there will be no strong bond at the community level. Therefore, it is critical that the architecture not only makes monumental gestures but also create a meaningful series of spaces at the human scale. The program is chosen to bring the community together by providing a service, expressing value, support and respect for its members, by creating a stronger sense of belonging, value and ownership within the community.

The site of the crematorium is on the northern most breakwater in Chicago’s harbor. This site is in close visual and physical proximity to the city center. It is also a very active area for both locals and tourists. The orientation of the crematorium and its views play an important role in the sequential dialogue and layout. The spaces facing North and East look out towards the seeming infinite expanse of the lake. These vistas work well for the ritual spaces. Likewise, the views to South and West look back towards the city and work best for the memorial and secular programs, which have a dialogue with the city as community.

The threshold of the space is a critical moment at which the individual is staged for the spatial experience, and the programmatic sequence is given momentary reprieve. This is also the pivotal moment where larger groups are broken down into individuals or subgroups. Thresholds are also an instance of conscious interaction with the architecture and this heightened awareness can be opportunities to manifest
detailing, material and human scale. The detail is the intricate energy of ritual manifested in human effort. The detailing will become more agitated at points of human interaction. This is meant to underscore the importance of the ritual and the value of the deceased person to the community.

The form is the physical language of the architecture. The formal language has been reduced into seven basic typologies: plane, valley, hill, canopy, edge, cave and tunnel. Each typology has inherent characters that depending on scale and context can have a very strong affect on us subconsciously. Materiality, as a design consideration, will strengthen and reinforce the design intent. The material is considered on a spectrum from warm to cold, micro to macro and rough to smooth. This spectrum of the scale of the material and its tactile qualities reinforce the acoustical, lighting and haptic intent of the space. Lighting also is an important factor for setting the mood of a space: direct versus diffused, single versus multiple, visible versus mystic and low versus bright. These different qualities of light were used in different combinations throughout the space to achieve the proper cadence fitting the programmatic piece, which in turn defines the spatial scale with an emphasis on creating attractor nodes that focus those experiencing grief into close contact with their support group. In the following paragraphs, I will explain the four primary programmatic elements that will be explored.

1. **Death as an uncomfortable topic.**

The cemetery of today is a suburban ideal; returning it to the urban center would offer a new set of possibilities. Hygiene and capitalism have been the impetus for moving cemeteries from the city centers, which has resulted in the,

"disassociation of death from the heart of the urban fabric and the destruction of a layer of history and consciousness. The nineteenth and twentieth centuries have been witness to this reduction in the relationship between the cities of the living and the cities of the dead, and an "increasing reluctance to address death as the inevitable consequence of life."³

The architecture associated with death is generally that of the neutral sympathy of the undertaker. Unobtrusive and bland like the piped music which plays on a loop in funeral homes, “it is an architecture which does not attempt to address the gravity of its theme or the existential questioning and crises which death can prompt, but which attempts to disguise its purpose with the gentle forms of a neo-vernacular, or a simple but pleasing institutional modernism of the type used in hospitals and geriatric homes.”⁴

This same trepidation for addressing death is recognized by Freud, who writes

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⁴ Ibid.
"We have shown an unmistakable tendency to put death aside, to eliminate it from life. We attempted to hush it up, in fact, we have the proverb: to think of something as of death. Of course we meant our own death. We cannot indeed, imagine our own death; whenever we try to do so we find that we survive ourselves as spectators. The school of psychoanalysis could thus assert that at bottom no one believes in his own death, which amounts to saying: in the unconscious every one of us is convinced of his immortality."5

This desire to ‘hush up’ death is to our detriment because without recognizing and accepting death as an unavoidable eventuality we live without recognizing the limited nature of our time. This timeless fantasy in which many of us exist deludes us, as it is in our human nature to squander something that we do not value.

2. Weakened sense of place

Today it is exceptionally easy to perpetuate the “timeless fantasy” and live superficially in the present. We are the target of a relentless barrage of advertisements promising, through a glut of images and noise, to save us from pain and/or provide pleasure. We are made more susceptible to these offers due to the dilution of traditional place based identity. Globalization and technology have removed the need for small local communities or neighborhoods. We are no longer limited to our local grocer or ‘physical’ social networks, but now, through modern means of transportation and communication, can go anywhere and socialize with anyone. Place-based identity was strongest in the past, when people were born, lived and died in the same neighborhoods. Neighbors knew each other; they knew their families, and that meant something. Communities were defined by their shared values, goals and socio-economic status. Where you came from spoke to who you were, and what you believed. Communities and neighborhoods were support networks watching out for each other and helping each other in their time of need. There was a sense of belonging, support and identity.

Capitalism promises to fill this void in identity with brands that promise ‘unique’ personalities to those who consume. The two major hallmarks of this consumption are image and speed. The identities we subconsciously associate with brands are established through a barrage of images, which are pervasive, and constantly escalating. The noise created by this relentless barrage has caused a shift in how we perceive the environment and thus how we experience it. We are constantly conditioned to this stimuli, becoming ever more superficial, as we learn to ignore ever more stimulation. The second major driver of contemporary capitalist

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3. Creating place by shifting the role of death

Death is a fate that awaits all of us despite creed, social status, wealth, politics or race. We also have in common our strongest instinctual impulse, self-preservation. These are things that we as humans share. It is for this reason that we can feel such a strong sense of empathy and compassion for our fellow man in times of catastrophe. We are able to understand each other and connect over these most basic elements of our humanity. It is this same sense of unity and empathy that will be harnessed in this project as we are exposed to those mourning loss. Our mere proximity and the prominent placement of the crematorium and memorial enable us to validate their grief and the importance of their deceased loved one's life. The very fact that their loved one is laid to rest in such a prominent place, in addition to the intensive architectural dialogue, shows the deceased loved ones a respect and deference that will serve as the city's gesture of appreciation towards its citizens. This respect, appreciation and service will impart to the living a sense of belonging and convey to them that their community acknowledges their inherent value. These things will increase their sense of loyalty towards the city. The burial of their loved one within the city center gives them some claim to that small portion of hallowed ground that holds their loved one. As a result, they become co-owners of the city and feel a certain responsibility for it. The monument will create a timeline of its deceased members and it will be this linear quality of the monument that imparts to the city a history that its entire people have a voice in. It is a point of pride for each successive generation to be able to trace their ancestry back in the history of the city and see how their families are responsible for Chicago's success.

Chicago will give support and belonging to its citizens through the services, ritual, memorial and inurnment at the crematorium. The spatial design will insinuate a stronger sense of place and community through its architecture, while that of the memorial and final resting place of the urns will be within a larger field of the other deceased members of Chicago's community. This conscious design will pay great respect to the individual while also placing them in the larger context of the community of Chicago.
The memorial will function similarly to Maya Lin’s *Vietnam Memorial*, which names each individual casualty of the war chronologically, and in so doing tells some part of their story while paying them respect and imparts to their memory a degree of immortality. Interestingly, the memorial is one fluid wall that gives no name hierarchy, which shows equality and unity for all of those remembered. The crematorium would similarly honor all deceased members of the Chicago community that are cremated and interred at the facility. The design would also help to build community by creating spaces that bring those mourning and those witnessing their grief together, an interaction which would be an opportunity in which people of all different creeds, races, political and socio-economical status could come together and bond through their shared sense of loss or fear of death in a moment of unity, compassion and empathy. Moments of weakness and vulnerability could be transformed into a positive moment of understanding when Chicagoans could show each other support and compassion through which they could mutually feel a greater sense of belonging. The shared ground that is given to their deceased as a perpetual resting place reinforces the sacredness of this ground and ownership of the bereaved. This ownership comes with responsibility to maintain and uphold the land and community that the deceased and their loved ones are a part of.

4. Creating emotionally significant space for grief at the human scale

The larger intent of shifting the role, perception and placement of death in the urban context to act as a catalyst for community building, which all depends upon the impact this shift has on the individual. All communities are made up of their members who are tied together by some shared element. This being the case, we can assume that a stronger bond tying the members together will result in a stronger community. Therefore, it is imperative that the architecture and ritual pull forth deep experiential, emotive and symbolic responses in those participating in the spatial sequence. To achieve this evocative choreography of space, one must examine the emotions of grief and the needs of the grieving.

A top resource for this discourse is *Helping Those Experiencing Loss*, by Robert Grover and Susan Fowler. This book is an excellent resource for those dealing with grief and the loved ones caring for them. This book provides analysis of how we as humans deal with grief at all stages of human development. The second chapter of this work, “A Portrait of Grief,” was particularly helpful in developing an understanding of the role of ritual and architecture in the grieving process. The major themes extracted from this portion of the book are that grief is very dependent on the individual and the cultural norms within which they exist. Grief is always a process of acceptance and does not have set stages or timeframes; it does, however, have common themes and allowing the bereaved to express their emotions, thoughts and memories is critical to acceptance of their loss. The grieving process is very personal. It is an immense comfort for the loved ones to be assured that their grief and the life of the deceased is meaningful and that their memory will live on in some form. It is this basic reassurance that the
memorial and ritual seeks to provide. The techniques of handling grief that this book describes will be used to design spaces that assert the importance of the lost individual, their role in the larger community and provide flexible spaces for mourners to mitigate the different stages of grief.

The book begins with a quote from Kubler-Ross and Kessler:
“We eventually lose everything we have, yet what ultimately matters can never be lost. Our houses, cars, jobs and money, our youth and even our loved ones, are just on loan to us. Like everything else our loved ones are not ours to keep. But realizing this truth does not have to sadden us. To the contrary, it can give us a greater appreciation for the many wonderful experiences and things we have during our time here.”

This statement expresses the major theme of this thesis project: *To invoke appreciation of those we love and to inspire a commitment to maximizing our time here.*

‘Maximizing our time’ is an attitude that arises from this realization that all our personal accomplishments and worldly wealth will not follow us beyond the grave and only our legacy will remain. Legacy is the knowledge, objects, works and relationships that are bequeathed and whose impact defines the memory and the value of our lives. There is a very real urge and need, in almost all, to cheat death and, as Philosopher Stephen Cave points out, one of the major techniques by which to accomplish this is by creating a legacy.6 It is the argument of this thesis that the awareness and effort to live a life with lasting meaning will result in a fuller life for the individual and everyone they come in contact with.

*Helping Those Experiencing Loss* begins by defining the semantics of loss. “Mourning is the external part of loss. It is the actions we take, the rituals and the customs. Grief is the internal part of loss, how we feel.”7 The outward expression of mourning is critical to capitulating and validating the grief felt by those who have lost. Originally, Elisabeth Kubler-Ross scientifically broke grief into five stages. The five stages are summarized by Kubler-Ross and Fowler as follows:

**(Stage 1)**

Denial occurs when one cannot believe that he/she won’t see the loved one again. This helps the survivor to survive the loss. The griever has difficulty believing what happened; they wonder if it could have been prevented. As they accept the loss, they are beginning the healing process, and the denial starts to fade. In this process, the feelings they are denying start to surface.

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(Stage 2)

Anger may be directed at the deceased loved ones for not taking care of themselves, at the doctors, or at the surviving spouse for what they did not do. They may be angry that they are left alone. These feelings may not be logical, but they are legitimate feelings. Other feelings that may emerge are panic, sadness, hurt, and loneliness, which become stronger as they begin to function normally again. They may have feelings of guilt, which is anger directed inward.

(Stage 3)

Bargaining occurs as the survivor realizes an impending loss or experiences a recent loss. They want the other person to be restored and they elicit any number of "if ... then" scenarios to bring the loved one back... Guilt is often bargaining's companion.

(Stage 4)

Depression is the deep, empty feeling of loss. Life seems pointless... Depression in grief is a way of protecting the grieving individual by shutting down their nervous system so that they can begin to adapt to something that they feel incapable of handling at the time.

(Stage 5)

Acceptance is not being all right with the loss of a loved one – most people never feel okay about it. This is about acceptance of the loved ones removal from our lives and learning how to live life within this new reality.8

These stages of grief are set forth as guidelines and not as sequential stages of the grieving process. Of these stages Denial is the first hurdle to overcome on the road to acceptance. How can one accept something they deny as reality? The ceremony or ritual plays a critical role in initiating the grieving process. It is a public acknowledgement of the loss and a validation of both the value of the life lost as well as the bereaved's right to mourn. It is also the vehicle by which support is rendered. Giving the mourners the chance to begin integrating their loss into their lives.

"Loss produces permanent changes, and grieving has no definite end. The intent is not to revert to life before the loss but to learn to integrate a loss into a new social context and identity."9 Fowler continues by citing Therese Rando's model of grief integration with the following five points:

1. Recognizing and accepting the reality of the loss

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9 Ibid., 17.
Common feelings during this phase are fear, panic, feeling overwhelmed. Those experiencing this may feel they are losing their minds.

2. Reacting to, experiencing and expressing the pain of separation
In this second phase the bereaved give up control and resign themselves to the feeling of chaos. Short-term avoidance and distraction are not necessarily maladaptive, that is, some avoid memories or immerse themselves in work, travel, or generally keeping busy.

3. Reminiscing
Telling and retelling memories is a way of keeping loved ones alive. Telling or writing stories and sharing photographs is an important step in finding meaning for loss.

4. Relinquishing old attachments
While research indicates that bereaved individuals maintain a bond with the deceased, the challenge is to form new attachments and love other people.

5. Readjusting and reinvesting
One must learn from his experiences and grief, recognizing the interplay between life and death, and learning to live in an imperfect world. Through readjustment, we can emerge stronger through greater self-knowledge, empathy and compassion toward others.

This resource indicated that the predominant means of helping those experiencing grief was to connect them with their support system. It is important for the grieving to know that they are not alone and that they do not have to carry their grief alone. They are much better off if they can externalize their feelings, emotions and attention. Spaces that enable them to understand and quantify their loss through ritual, storytelling, remembering, and gathering are very important to this process. Escape and avoidance can also be parts of the stages of grief dealing with denial.

Acceptance is the stage of grief at which we are not necessarily okay with our loss but have come to terms with it, and refocused our energies in this new reality. This re-evaluation is a necessary part of acceptance and in it there exist the opportunity to transform death from a personal tragedy into a positive transition. When we examine our lives critically and refocus ourselves on what really matters, we can see the world in a totally new way. Death is so final and so stark an experience that it can shock us out of our daily existence and help us to see ourselves outside of our typical selfishness. We easily become consumed with the concerns of our daily lives. It is so easy and natural to become completely overwhelmed with our own selfish desires and trivial problems that we ignore those aspects and relationships in our lives that truly matter. Death can strip us bare. It is a point of fear to realize that you will be no more but also a point of liberation because if we accept this eventuality we can refocus our lives from the trivial to the significant.
Socrates famously said, “A life unexamined isn’t worth living,” and yet: today the constant urgings, images and directives of consumer culture are totally immersive. Our smart phones are the pacifiers of the current; never want to grow up generation. We clutch them even as we sleep. Capitalist corporations do our thinking for us and display images to inform us what we should purchase in order define who we are through branding. They have created a culture of need. We want and need the newest shiny toy. We are slaves to our formed impulses and the resulting credit card debt. "We are controlled through opulence. We are told what we should want and when we have all these things we ask no questions." It is essential to examine our own existence and identify the drivers that shape our existence. Action without understanding leads to lives devoid of human dignity. Our ability to make decisions through a logical strain of reason is at the core of what makes us human. Action without reason dehumanizes us as we are reduced to purely instinctual action. The examination of self is a very unpopular topic in today’s culture. We are not living for anything outside our own pleasure in the current moment and therefore such things as goals, responsibility and duty are unpopular and the dream of eternal childhood is the ideal. This lifestyle becomes a problem on both a personal and social level because it is conceived on selfishness. This motive poisons our relationships and leads to isolation. Selfishness will also have a negative effect on a society particularly one founded on democratic ideals. Today we see the age of adulthood ever receding as the majority of this generation’s members sludge through college without any real purpose other than instant gratification. David Elkind called this egocentrism the “personal fable”. The personal fable is an alternative reality in which the individual believes the world to be focused on themselves. They are unique, special and invincible. The danger of the personal fable is that it predominantly effects the youth. This is an issue because it is at the critical juncture from adolescents to adulthood that the course of our lives is often defined. Imagine how much fuller life would be if the potential of youth were focused on curing cancer, strengthening personal relationships or having a positive impact on the local and global community.

Paul Wong a leading mind in Existential Positive Psychology states, “Since we only go through this life once, we have reasons to wonder how to make the most of it. The worse fear is not death, but the discovery that we have never really lived when the time comes for us to die. We all have the urge to desire to live fully, to do something significant,


and to make a difference, so that we don’t have to dread the death-bed realization that we have squandered away our precious life. Therefore, we dread a meaningless life as much as we dread the terror of death.”

Viktor E. Frankl, developer of logotherapy, or the belief that our primary motivation is the search for meaning, recognizes “three values of meaningful living:

(1) Creative value - we give of ourselves to the world through creative efforts,
(2) Experiential value - we receive something from the world, such as love and beauty,
(3) Attitudinal values - we adopt a positive attitude towards negative situations beyond our control.”

These advantages cited by Frankl create value not only for the individual and their personal relationships but also society as a whole. This seemingly selfish aspiration to make ourselves known, through impact and legacy provides the impetuous for many architects’ goals and leaves us with the structural remnants and reminders of those whom achieved their goals.

**Architectural theory**

The work of Juhani Pallasmaa, Steven Holl, Olafur Eliasson, Diller and Scofidio and Peter Zumthor are the field in which this thesis grounds itself for its architectural realization. The work of these theoreticians, artists and practitioners all concerns itself with the current state of culture and creating immersive experience. All create work that is artistic and architectural in nature. This work and the theoretical literature attached with it will serve as this thesis’ general precedents.

The first of these talents is Olafur Eliasson, an artist, who does diverse scaled art installations and architecture with a strong focus on human interaction and experience. His work features simple stimuli that transform the viewers into actors and thereby create unique moments and phenomena both in the life of the piece and the people interacting with it. His work is also interested in the expression of time. He does this by creating spaces and stimuli that change with time, light or the movement of the gallery goers.

The second is Steven Holl. Holl is known for architecture that challenges the nihilistic contemporary culture and like Pallasmaa seeks to infuse meaning into our lives through the evocation of the totality of our lived experiences. Lastly, Diller and Scofidio is an artistic pair of architects that have a definite intentionality to their work. D+S seek to raise

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13 Wong, Dr. Paul, *Existential Positive Psychology*
awareness of the influences on our lives that shape us and define our existence. The field created serves as a stepping off point and a frame of reference for the efforts of this thesis. The work of these theorists and architects reveals an opportunity inherent in architecture and art to draw the participants out of their day-to-day contexts and frame larger questions of existence.

Juhani Pallasmaa’s *Eyes of the Skin* is a major text that elaborates upon the idea of superficiality in contemporary culture. He is an important source as a generator for the issues facing place making, meaning and experience. Pallasmaa argues that our culture is so predominantly visual that all other senses have been suppressed. The result is that our world has been flattened and much of what makes us humans has been lost. Pallasmaa names this visual dominance and sensory deprivation “ocularcentrism”.

“The growing experiences of alienation, detachment and solitude in the technological world today, for instance, may be related with a certain pathology of the senses. It is thought provoking that this sense of estrangement and detachment is often evoked by the technologically most advanced settings, such as hospitals and airports. The dominance of the eye and the suppression of the other senses tends to push us into detachment, isolation and exteriority. The art of the eye has certainly produced imposing and thought-provoking structures, but it has not facilitated human rootedness in the world. The fact that the modernist idiom has not generally been able to penetrate the surface of popular taste and values seems to be due to its one-sided intellectual and visual emphasis; modernist design at large has housed the intellect and the eye, but it has left the body and the other senses, as well as our memories, imagination and dreams, homeless.”

This statement addresses the alienation of the body as experienced by many in contemporary culture. He also theorizes that the endless string of unrelated images desensitizes us to their inherent meaning and leaves us numb. His theories state that the visual noise and obsession of today pull us away and drone out all deeper reflection and experience. This, to a large part is true, so a program dealing with death is one that offers a stark truth that all this will fade and what has true value are not the things or images but the people around us in this time of traumatic loss.

Pallasmaa also addresses the question of place when he speaks about experience, existence, and time:

“The technologically expanded and strengthened eye today penetrates deep into matter and space, and enables man to cast a simultaneous look on the opposite sides of the globe. The experience of space and time has become fused into each other by speed (David Harvey uses the notion of ‘time-space compression’), and as a consequence we are witnessing a distinct reversal of the

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two dimensions – a temporalisation of space and a spatialisation of time. The only sense that is fast enough to keep pace with the astounding increase of speed in the technological world is sight. But the world of the eye is causing us to live increasingly in a perpetual present, flattened by speed and simultaneity.\textsuperscript{15} This theory seems to reveal why much of our place based identity has been diluted. We no longer are so linked to place or our community; the world is becoming ever more one large economy and community. Technology enables us to be everywhere and nowhere. We are continually connected and space is no longer limited so dramatically by time. This fusion of space and time, Pallasmaa goes on to say, "collapses the world’s spaces into a series of images on the television screen."\textsuperscript{16} He argues that these realities diminish the world and its experiences to commoditization, rendering the meaning of life little more than a display—merely another object for sale. This thesis seeks to utilize these ideas to motivate and temper the design realization, along with elements that create breaks in the continuum of space and time, thereby reinvigorating the senses and reestablishing the passage of time as it relates to human mortality.

Heightened human awareness through architecture is a theme in all of these writings and it is continued in the work and theory of Steven Holl and Peter Zumthor. This raised awareness is important because it is awareness of self; this connectivity to our internal workings is critical to our own happiness and fulfillment. These architects align closely with Pallasmaa, in that they are designing architecture to serve as a framework for the natural environment. Holl and Zumthor are interested in the manipulation of predominantly natural elements such as daylight and the seasons to reinforce the passage of time, materiality, and the human body in space. Holl’s work often utilizes overlapping and unfolding elements in his materials, detailing and spaces themselves, in order to create a layered and holistic experience conveying an overlapping of the background, middle ground and foreground of our lived awareness. Holl considers the world in which we live to be a dense, complex matrix of past experiences that shape meaning and attribute significance to our personal existence. It is this meaning, in its fullness, that phenomenology seeks to draw forth in human experience by presenting the overlapping elements individually, but primarily as a whole. The resultant, Holl postulates, can assign meaning to our present state of being.

A unifying element in all these theorists is a resistance to the effects of globalization. Globalization is the result of technological advancements and has led to a shift in how we do business, how we perceive the world and how we relate to it. This shift has removed traditional ideals of place. We no longer associate our identity with a local region because we are no longer limited to one. We no longer have a connection with physically nearby people and our activities are no longer common knowledge as they once were in small communities. We are in large part who people believe us to be and if we have no connection to people or place than we have no connection

\textsuperscript{15} Pallasmaa, \textit{The Eyes of the Skin: Architecture and the Senses}, 24.
\textsuperscript{16} Ibid.
to an authentic identity. The works of these authors seek to delve into meaning. How do we reintroduce meaning into a culture defined by rising “nihilistic attitudes”? Holl’s work provides an excellent vocabulary of strategies to foster experiences that do not place value on a coded or frauded message, but on the experience itself.

**Precedent review**

Alongside the works of the aforementioned architects, another important precedent for the type of architecture this thesis proposes is the recent 9/11 Memorial Museum by Snohetta Architects. The museum is a fractured shard in a field of deciduous trees flanked on either side by the massive fountain voids that mark the fallen World Trade Center Towers. There is an absence in the field that speaks to the grief of the past, while the towers surrounding speak to hope in the future. Therefore architect Craig Dykers saw their intervention as a bridge between these two states. The museum is largely subterranean, creating almost a modern archeological journey to the hallowed “ground zero.” The formal expression of the museum is not overt and the highly reflective glass and steel shard is dwarfed by its monumental context in the heart of lower Manhattan. The architects meant this entry is to serve as a place to collect and calm oneself before journeying down into the events of the past. The intent here was to create a clear definition between the program of the museum and the memorial. Although both are somber spaces by their context, the memorial garden has to serve the pedestrian needs of the surrounding city. It has monumentality about it but is not overwhelming and the quality of the space can be appreciated as beautiful and functional for everyday use. The museum below ground has a very specific story and emotion to convey. Therefore it was a natural jump to place this space that commemorated the dead underground. The passage and ramping procession down takes you deeper into the emotional fraught environment and clearly defines a passage into a different realm of existence.

**Architectural proposition**

This thesis seeks to draw upon death as a motivating element to focus meaning of life on both a personal and social level. The resultant architecture strives to create an atmosphere in which the emotions of fear

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and loss can frame the question of life. Why are we here and what does our life mean? This question can define our existence and drives man into despair, hedonism, spirituality and/or legacy creation. The two former paths are both introverted retreats and isolate the individual. The later can and should be extroverted in nature, as the individual is united to the larger canvas of human existence, and seeks to make a difference or connect with like-minded individuals in a unified cause. The architecture of Holl, D+S and Snohetta shows us that architecture can give pause and heighten our awareness, and that when this is paired with a program that identifies mortality as a foreground element, then the background topics of time and legacy can be interwoven to frame the perpetual question of life’s meaning.

The power of architecture is framing. It takes on meaning outside of function because it is able to focus human awareness. Buildings can be sculpture when their focus is form but buildings are most successful when they are frames. Architecture as frame does not seek to formally express itself as the goal but instead to focus the understanding on something beyond. Philip Johnson’s Roofless Church is exactly this. Simple in its experience it draws upon the visitors understanding of God to presence the divine through nature. This thesis hypothesizes that foregrounding death in program and framing the infinite via architecture will draw forth the passage of time and raise the value of it as our most precious nonrenewable resource.

The architectural expression will be minimal as grief is an internal struggle. The architecture will provide a framework facilitating the ritual cremation and burial while drawing upon the contrasting nature of the urban environment of Chicago, together with the seeming infinity of Lake Michigan. The architecture, like burial, will largely be burrowed below ground or water with natural lighting acting as a highlighting and focusing element.
1. Basel Crematorium
2. Treptow Crematorium

3. Wyre Forest Crematorium
Site selection

The crematorium, as a building type, is largely an issue in urban areas where the cost of land and its availability provide particular difficulties for traditional burial. However, the importance of the natural environment as an indicator of the passage of time and an analogy for the infinite strongly suggests a connection to water.

Tadao Ando’s Wood Museum shows a staging of spaces that will serve as inspiration in principal for the staging of spaces. The path, as with the ritual, is linear, marked by different points or nodes. Time, also, is
experienced as a linear progression and it is time that is precious for those mourning because it is the holder of their memories and the only mediation of sorrow through acceptance. The site, which will grow out into Lake Michigan from the heart of Chicago will rest in the threshold between the natural infinity of the lake and the urban temporality of the city. It becomes the edge of the knife between above and below; life and death; this world and the next; light and dark.

I am interested in crafting a space that integrates the tectonic detailing, paired with material and weighty heavy formalism that feels prehistoric in nature. The detail will be critical as will the staging of experience. The human scale and intimacy can be developed through the detailing of human interaction both visual and haptic. This thesis design seeks, through these means and methods, to prompt introspection of life through the interaction with death. The architecture will frame the infinite and eternal raising hopeful yet urgent notes as we consider our own legacy in the face of our ever-shrinking time of existence.

The Project and its Role in Client Culture

Cremation is a rising trend in the United States. Today 41% of Americans choose cremation over burial versus 15% in 1985. The replacement of burial with cremation is a world trend. Spurred on by tough economic times, cremation has been chosen increasingly as it can save the bereaved families three to four thousand dollars. Other factors leading to an increase in cremation include land shortage, transportation costs, cultural acceptance and flexibility.

The city of Chicago with just under 3 million residents has approximately 65 deaths daily within the city limits and 210 in the greater metropolitan area that has a population of 9.5 million. The city has a need and opportunity to provide a dignified disposal of the dead that creates a monument to their lives, and creates a tourist attraction. The city also has the vested interest of maintaining land for commercial or residential uses, versus graveyards, which are not a good use of valuable and limited urban land. At the same time the city has an interest in maintaining the value of place to their population by enabling Chicagoans to be buried in Chicago and not some foreign and distant suburb.

The ability to bury the dead in a prominent place within the city will strengthen the sense of place for those left behind. The city of Chicago is a business and as such it is concerned with the preservation of its identity,

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profitability and image. The addition of a crematorium, columbarium and memorial to the dead would align with these goals. The identity of a city is derived from its people and the work of their hands. A city is the patchwork of the labor, culture and values of many generations. A city is built upon the vision and labor of those that have gone before and it is the lives of these founding members and each successive generation that gives a city its unique character. A celebration of commemoration of this strengthens the city’s identity and image. The image of a city is its brand and this brand is based in large part on the authenticity, uniqueness and cultural history all of which are derived from its past and present population. Therefore a celebration of its people is a celebration of what make Chicago great and special.

The average cost of a funeral in the US is $5,000 - $7,000. The cost of a funeral in Chicago is higher still with the cost of land helping to further hike the prices. However, even without considering the higher average cost of a Chicago funeral the greater metropolitan area of Chicago spends between 1 – 1.5 million dollars each day on funerals. This is a huge market that results in approximate 550 million annually. Chicago could greatly reduce the cost for its population by providing the less expensive option of cremation to its population while still offsetting the operation cost.

Inventory of project spaces and experiences

The activities and functions of a crematorium must provide for three groups: the mourning, the deceased and the workers. These three groups need a variety of spaces that are often specific the user group. The mourning group comes from many cultural and spiritual backgrounds and it is difficult to craft spaces that are specific to a ritual or denomination. However, this group all has in common the experience of grief with all of its 5 stages: denial, anger, bargaining, depression and acceptance. The spaces of the crematorium will focus on aiding the mourners towards an acceptance of their loss. One of the key techniques to help them achieve this is to afford the mourners places to tell their story and leave a physical record so that their loved one might never be forgotten and feel the support of their loved ones. A second technique is to help them rationalize their loss so that they can accept it, often achieved by finding comfort in a greater power. It is a weight off the mind to see death not a random act without meaning but as part of a larger plan by a plan or process.

This openness to belief in a higher power, however it may be defined, forwards the concept of architecture as frame. The frame guides and directs those mourning towards something greater than themselves.

This greater power will be materialized in nature and in the abstract
grandeur of the architectural spaces, and their highly crafted realizations, as
well as the human communities of fellow-mourners gathered within. The
natural environment is a very flexible manifestation of higher power in
which those dealing with loss can find their deity or merely the great forces
of nature.

The sequence of spaces will follow the path and ritual of mourning.
This journey begins with the procession towards the site. The site will rest
upon a large natural body of water and as the crematorium is approached
the mourners will find themselves in an intermediate zone between the
contemporary city and constructs of man, and the force of nature and the
seeming infinity of the lake. The activities observed from the car window
will stand in stark opposition to those within the car. The concerns and
frivolity of daily life seem far off and alien as they are consumed with their
own grief. Upon arrival at the site they will enter the parking garage, which
will serve both the beachfront and the crematorium. The two groups will be
split and it is at this point that the mourners transition from a larger social
context to the crematorium, which is a borderland between the
contemporary and eternal.

The initial sequence of entering the crematorium from the parking is
meant to further highlight the drastic anomaly of death as seen in contrast to
the daily routine. This is achieved by the drastic duality of the views from
the crematorium, which can encompass both the city, and the untouched
infinity of the lake. The natural and urban will mark the contrast between
life and death, contemporary and eternal and help the mourners see their
own lives in the context of death. This presencing of the context is meant to
raise awareness about what is really important, and forge resolve. The entry
sequence will bring the mourners up from the parking garage and orient
them facing the city. This is a final gasp of air before descending into the
crematorium. The entry is a long linear space that connects the three major
chapels and smaller mourning spaces. The spatial progression is one that
interacts ever deeper with the subterranean as the ritual progresses from
the wake, to the ceremony, to the cremation and to the receiving of the
ashes. The underwater crypt suffused in lake water filtered light will be the
greatest depth of the sequence which then pushes upwards and outwards to
the surface as the mourners are reborn into the infinite expanse of the lake
and sky.

The chapels will have space that, not unlike the Pantheon or a James
Turrell Skyscape, will feature a merger with the sky that pushes up and into
the eternal. These spaces will also be marked by the changing light and be
brighter, more airy and lighter than the other spaces. The spaces set aside
for prayer and quiet contemplation will be more crypt like as the light
entering them will be heavily filtered and the materials palate weighty; but
these spaces will include release points so that the grieving can escape into
the sunlight and open air. The spaces for receiving the ashes will be places
of record in which the family and friends can leave their story with their
deceased love one. This space will be heaviest and very contemplative. It
will be a space of death and remembrance.
The living must return to their world and leave the dead to theirs. The spell of the dark reverie is broken as the living return to the surface and it is here that a new beginning must be forged and final goodbyes said. Whether in the form of spreading ashes over the lake's waters or placing their ashes in the columbarium, the final act of separation is made. The mourners must turn their backs on the world beyond to once more return to the city. The return, though difficult, is a necessity in learning to find new purpose and focus in the lives of those who must come to accept their loss in order to live on.

**Spatial requirements:**

Parking

- 250 spaces 108,000

Function

- Loading 4,000
- Cremation furnaces 4,700
- Staging Room 2000
- Embalmment 2,500
- Inurnment and Urn Storage 1000
- Administration 1,200
- Break Room 1,000
- Cold Storage 7,000
- Janitor Closet 900
- Utility 3,000
- Staff Bathrooms 160

Total 56,750 square feet

Ritual

- Lobby 4,000
- Bathrooms 800
- Chapel 7,400
- Storage 600
- Reception Hall 4,000
- Catering Kitchen 200
- Ash Reception Chapel 2,800

Total 19,200
This program was developed through examination of *Death and the Detail*, a thesis by Charles Bucheit, as well as the Vestfold Crematorium in Norway.\textsuperscript{20}

6. Vestfold Crematorium, Norway

Design conjectures

Death and the City:

question:
what is the role of death within the urban context and what are the potential benefits of shifting our approach and outlook on loss so that our grief can be translated into a positive catalyst for community building, peace making, social equity, and personal growth?

intent:
create meaningful and lasting experiences for individual mourners so that they might better navigate the five stages of grief, prioritize their relationships, focus their goals and strengthen their sense of connectivity and belonging to the community.

strategies:

a. formal tectonics

b. celebrating the unseen

c. poetics

7. Formal Rational Diagram
8. *Stair from Parking*

9. *Lobby of Crematorium*
Annotated bibliography

_Experiential_


Juhani Pallasmaa’s *Eyes of the Skin: Architecture and the Senses* is a seminal work that strikes close to the core of this thesis’ end game. Pallasmaa is an advocate for ending the ocularcentrism of our culture in favor of a more wholistic sensory experience. This is in large part because the eye submits all the world to its 2D gaze and everything is collapsed and the potent realness of the world of experience in which we live is reduced. This is reaching toward a more significant experience through architecture and this paired with program will be the approach of this thesis.


*Being and Time* is a major work of Martin Heidegger that lays out a hermeneutic phenomenology. This work is important because it establishes that human being
(existence) is fundamentally temporal, continuously both past- and future-oriented, and therefore in need of facing death authentically.


Steven Holl’s *Color Light Time* is a small book that deals loosely with the techniques and goals of Holl’s architecture as it relates to titled keywords. The authors all provide written portions dealing each with a singular adjective of the title.


This is an interview with Olafur Eliasson about his work. Eliasson is an artist who does diverse scaled art installations with a strong phenomenological leaning. His work is apolitical and stresses the importance of simple stimulus that opens those participants to experience. He also believes that it is the people interacting with his work that gives his work life because without this interaction there is no life in the piece at it is merely an object. It is the people utilizing it as some sort of medium for experience that gives the object life and makes it art.


*Steven Holl and Chris McVoy* by Shlomi Almagor seeks to investigate the architecture of Holl and look closely at the inspiration that has shaped his phenomenological take on the profession. The book includes a number of pertinent quotes that strike to the core of Holl’s method and help to break down his work into managable bits.

Precedents


“Light Color Sound sensory effects in contemporary architecture” is an image heavy production documenting contemporary uses of the senses as icon or spatial definition.

Capitalism and Schizophrenia is a significant piece of work that provides a platform to speak to a cultural transition in human, social interaction. Contemporary culture has become more complex and flexible through the immersive use of modern technology that has facilitated the Attention Deficit Disorder of our Culture.


*Scanning* is a compilation of articles discussing the work of architects and artists Diller and Scofidio. The article written by UC's own Aaron Betsky provides interesting insight into the underlying message of their work, which is subversion, and displaying of the display which has become the purpose of architecture.


*Monument Builders* looks into the burial and crematory architecture of various architects and dives into the psychological and emotional experience of the cremation process. This work is the cornerstone of many of my theories addressing the physical qualities of the crematorium as expressive of these emotional qualities of burial and death.

Mostafavi, Mohsen and Leatherbarrow, David. *ON Weathering: The Life of Buildings in Time*

This resource is an interesting discussion into the visible passage of time on the exterior of a building. It looks specifically at some of Scarpa's works and the inclusion of weep holes that overtime will create watermarks on the façade showing the passage of water. This weathering speaks to the passage of time and gives the architecture a grit and age.

*Deathscapes: Spaces for Death, Dying, Mourning and Rememberance* edited by Maddrell, Avril and Sidaway, James

Good resource with a number of articles by different individuals. Reinforces the importance of the site context and landscape in the formation of mood and ritual in regards to burial ritual.