

**Place of Comfort:**  
**The Textile Tectonic Expressions of Living and Dying**

By  
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## Abstract

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This thesis titled, *Place of Comfort*, explores the emotional aspects of one's physical surroundings as perceived through the senses. In this exploration, the vision centric architecture of today is criticized for its lack of comfort. The cultural uses of shelter are examined and the presence of textiles, whether literally or abstractly, is proposed as a remedy to the current architectural conditions. The emotional aspects of textiles are demonstrated physically through the senses and socially through human notions of identity. Linking the human need for expression with one's emotions towards death, this thesis explores the realms of dress and death rituals as something intrinsically human.

These investigations are demonstrated by designing a building for funerary services located within Ottawa Ontario. The building is designed to host Chinese funerary services. The detailing of the building is further influenced by the theories of Gottfried Semper. It is through these design demonstrations that emotions are expressed via the celebrations of living and dying, in all its auditory, olfactory and tactile tectonic-*textility*.

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## Introduction

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In times of distress, individuals seek comfort and are often placated through the emotional aspects of one's physical surroundings as perceived through the senses. The problem with many current buildings is that they aim to please the eye alone and do not stimulate the olfactory, auditory or tactile senses – and therefore lack the ability to comfort. Through an analysis of sensorial emotions, this thesis intends to portray the abilities of textiles to provide such comfort and coziness. The properties of textiles are examined and are connected with emotions and eventually death. Thus, this thesis connects the concept of comfort with that of human emotions, sensorial perception, textiles and finally, death.

Chapter One deals with the realm of human emotions, its parallels to feelings and movement, and its general reliance on sensorial physical perception. The concept of comfort is introduced as one that is both emotive and sensorial. The suppression of the senses decreases one's ability to emote and experience comfort and delight. With this assertion, the second section of Chapter One introduces the current issue of ocular-centrism and its resultant lack of sensory stimulation.

Chapter Two concentrates on the stimulations of the senses with a focus on sensorial therapy and spatial perception. It is in this segment where the concept of textiles and its sensations are introduced. Through architectural description, this chapter shows how important tactile, olfactory and auditory stimulations are to architectural experiences, thereby emphasizing modernity's lack of sensory focus.

The beginning of Chapter Three discusses how textiles are identified with "coziness." This concept conducts the proposal of textiles as a remedy to the desensitized environments of current architecture. Supported by Gottfried Semper and Adolf Loos, this chapter

introduces the contention that architecture is related to, and originates from, textiles. The linkage between architecture and textiles are portrayed through notions of *cladding* and *clothing*. It is within these assessments that the emotional life and movement of *fabric* are discussed and are linked with *deformation* through the exploration of human tendency and identity. The emotional aspect of textiles directs us to the next chapter.

Chapter Four titled *Fabrics of Death* deals with the emotional response one has to another person's clothing. This is illustrated through case studies dealing with the clothes of the dying or the dead and eventually leads us into the notion of grief, culture and comfort as important in dealing with the dead and the dying.

The final chapter proposes the design of the thesis. Located in the current lawn bowling park by 1 McFarlane, Ontario, lies the intervention of a "funeral home". The building aims to demonstrate how the connective use of materials can stimulate the senses and create spaces of comfort.

# 1

## Sensorial Emotions

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### Sensorial Emotions

Bodily sensation provides the means through which one experiences his or her surroundings. When an individual walks barefooted on the shore of the white sandy beach, it is the view of the sunset, the tactile feeling of sand between the toes, the breeze against the skin, the olfactory scent of the salty ocean, the sound of the crashing waves and the chirping of the seagulls - that encompasses the walk on the beach. It is the totality of the senses that embodies an event.

Bodily sensations, in all its tactile, olfactory, auditory and visual experiences have the ability to generate emotions. Antonio Damasio in *The Feeling of What Happens* describes how emotion occurs when the body processes certain objects or situations through the sensorial devices.<sup>1</sup> All objects evoke emotional attachments to varying degrees and it is our sensorial interactions with these objects that produce feelings and emotions. Hence, there is great emotional potential within architecture.

The suppression of sensations results in the suppression of emotions which is intrinsic to our human nature. Antonio Damasio stresses the distinct nature of human emotions and describes how “at first glance, there is nothing distinctively human about emotions in abundance as many species in the animal kingdom possess emotions...however, a deeper look into the products of emotion such as music, sculpture, film, literature and comedy

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<sup>1</sup> Damasio describes how emotions occur in one of two types of circumstances. The second type of circumstance is when the mind conjures up memory of certain objects or situations. Antonio Damasio, *The Feeling of What Happens*, 56.

portrays how imperative emotions are to our existence.”<sup>2</sup> Damasio describes these artistic modes of expression as ‘products of emotion’ because they are inspired by emotions such as joy, sadness and anger. Emotions also initiate ritualistic events. Often it is happiness that instigates the need for celebrations of birthdays, and sadness that perpetuates the need for death memorials. The emotional way in which individuals perceive and react to the world is what makes humans unique. Thus, it is important for us to understand the concept of human emotions.

Emotions are connected to movement; body changes are synonymous with emotional episodes. This connection is evident in the etymology of the word “emotion”. The word derives from the Latin *e + movere* which mean to move out of or to transport.<sup>3</sup> In *Emotion Concepts*, Kövecses describes how sudden “fright, nausea on smelling a putrid odour, lashing out against a painful stimulus, depression following loss of a loved one, and so forth” are states where the body seems to act “on its own” and often against one’s own will.<sup>4</sup> Weeping is a primary example of an uncontrollable expressed reaction. The most emotional events in a person’s life such as the birth or the death of an individual are often accompanied by weeping. Kövecses depicts emotions as an uncontrollable natural force: “emotions are episodic or relatively short-lived: they are like whirlwinds; they come in surges; they sweep over us and then subside...”<sup>5</sup> The metaphor of natural forces – from stormy weather to psychological disturbances, suggests that emotions are undergone rather than deliberate.

The body’s ability to sense is dependent on emotions. Those afflicted with depression are prone to experience a numbness of the senses. In *The Scent of Desire*, Rachel Herz describes how therapists have noted that their patients with serious depression often complain of their

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<sup>2</sup> Antonio Damasio, *The Feeling of What Happens*, 35.

<sup>3</sup> Zoltán Kövecses, *Emotion Concepts*, (New York; Berlin: Springer-Verlag, 1990), 154.

<sup>4</sup> Zoltán Kövecses, *Emotion Concepts*, 174.

<sup>5</sup> Zoltán Kövecses, *Emotion Concepts*, 163.

decreased ability to detect odours. This phenomenon is confirmed by odour sanctity tests which detect improvement in smell sensitivity after the use of anti-depressant medication.<sup>6</sup>

Inversely, the loss of sensation can result in depression. The onset of depression is notable in those who experience the loss of one of their senses. Anosmia, which is known as the loss of smell, has been linked to suicide and depression. By illustrating the case study of Jessica, a victim of a car accident that caused her to have Anosmia, Herz describes how she felt disconnected from other individuals and was afflicted with the even greater misfortune of being disconnected from herself. This resulted in her general avoidance of social contact and her eventual suicidal tendencies.<sup>7</sup> This case study highlights how the stimulation of sensory perception is crucial for individuals to feel connected to the world. The suppression of the senses decreases the ability to emote and experience delight.

### **The Loss of Comfort**

The current state of architectural practice promotes the suppression of bodily sensation within today's built environment. Architectural design has become an exploration of shape and form with the principle purpose of pleasing the eye. The problem here is that vision is the most isolating sense. The prominence of vision, known as ocular-centrism has been explored by philosophers, writers and architectural theorists including Martin Heidegger, David Michael Levin, Maurice Merleau-Ponty, and Juhanni Pallasmaa. On comparing vision with non-visual senses, Juhanni Pallasmaa explains in his writings, *The Eyes of the Skin* that this visual emphasis contributes to the experiences of alienation, detachment and

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<sup>6</sup> Rachel Herz, *The Scent of Desire*, (New York: Harper Collins, 2007), 8.

<sup>7</sup> Rachel Herz, *The Scent of Desire*, 7.

solitude in the world today.<sup>8</sup> This is due to the fact that vision on its own does not provide comfort.

The word 'comfort' is derived from the latin word *confortare*, meaning to strengthen.<sup>9</sup> The concept of comfort is one that addresses the emotions and the senses simultaneously. Comfort possesses the double meaning of physical relief and consolation, thus tying in the senses with emotions. Comfort is best stimulated through the non-visual senses. During distress, melancholy and other emotional states where alienation is least desired, it is sound, smell, taste and especially touch that best comfort an individual. A soft assured voice calms and consoles, the smell of a scented candle relaxes, the smell and taste of baked cookies placates, and the embrace from a loved one provides a sense of emotional complacency.

### **The Dominance of Vision**

The trend towards contemporary ocular-centrism can be traced by surveying the developments of Johann Gutenberg's printing press, the Enlightenment and the use of artificial light.

Invented in 1439, the printing press allowed for the mass-production of texts. This ensured literature as a means of communications over traditional speech. With literacy, knowledge is gained through sight as opposed to oral storytelling. Constance Classen in *Worlds Of Sense* observes how writing is a disembodied entity. As knowledge was once held within an individual it now exists separately, thus creating a "state of alienation by separating the writer

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<sup>8</sup> Pallasmaa illustrates how sound is social but vision is solitary by stating that "we stare alone at the suspense of a circus, but the burst of applause after the relaxation of suspense unites us with the crowd". Scent portrays the essence of a space that can only be experienced through physical encounter. There is an unavoidable "intimacy that the sense of touch carries." Taste is even more intimate than touch as the subject must encounter one's tongue in order to be tasted. Vision allows us to observe at a distance. Through vision alone, the world is two-dimensional. Touch is required to clarify and confirm the presence of items and spaces, teaching us that we live in a three dimensional world. Juhani, Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, (West Sussex: John Wiley & Sons Ltd., 2005), 19.

<sup>9</sup> T.C Donkin, *Etymological Dictionary of the Roman Languages*, (London: William Norgate, 1864), 144.

from the written and the reader from the writer.”<sup>10</sup> Individuals are distanced from their sources of knowledge, thereby diminishing active social engagements as it is no longer required to transfer information.

It was during the Enlightenment of the seventeenth and eighteenth century that sight amalgamated with the sciences and “vision came to provide *the* means of understanding the world.” Classen explains how the ocular obsession of the Enlightenment can be seen by observing the transitioning purpose of the garden: “...by the endeavors of horticulturalists to create bigger, brighter roses which bloom more often, without regards of their traditional characteristics, and in particular, their odorous essence.”<sup>11</sup> Classen explains how sight is associated with mass production: “The triumph of sight over smell represented a triumph of surface over essence, of quantity over quality.”<sup>12</sup> She explains that carpet bedding in gardens are an early portrayal of the mass produced pleasures for the eye. From the enlightenment to the 21<sup>st</sup> century, technological advances have reinforced image as the primary means of communicating ideas. The most noteworthy technological invention was that of artificial light.

Prior to artificial light, entire cities were forced into darkness at the break of sundown. Guided by candlelight and torches, the nocturnal world was that of accents of shimmery yellow light dancing in the immense blackness of shadows. After dusk, the eyes would rest and the other senses would awaken. Today’s cities are without dimness. Imagination and emotional fantasy are difficult without shadows. Pallasmaa illustrates this point by stating: “How much more mysterious and inviting is the street of an old town with its alternating realms of darkness and light than are the brightly and evenly lit streets of today! The imagination and daydreaming are stimulated by dim light and shadow.”<sup>13</sup> Artificial light contributes to visual exhaustion as it allows individuals to see at night as they do during the

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<sup>10</sup> Constance Classen, *Worlds of Sense*.

<sup>11</sup> Constance Classen, *Worlds of Sense: Exploring the Senses In History And Across Cultures*, (London: Routledge, 1993), 30.

<sup>12</sup> Constance Classen, *Worlds of Sense: Exploring the Senses In History And Across Cultures*, 31.

<sup>13</sup> Pallasmaa, Juhani. *The Eyes of the Skin: Architecture and the Senses*, 46.

day. This is problematic because “the human eye is most perfectly tuned for twilight rather than bright daylight.”<sup>14</sup> With visual overstimulation, the pleasures of the other senses are lost.

As emotions are evoked through sensory stimulations, the ability to emote relates to sensorial proximity. Indifference is more likely to occur when the non-ocular senses are uninvolved and the event is indirectly experienced. The television, as a product of ocular-centrism, is a communicative media of news and occurrences around the world. Televisions portray fanatical global atrocities, natural disasters and crimes that play with our fear, grief and other intense emotions. However, as experiences are viewed on a screen and are not spatially perceived, there is a particular apathy that occurs. The emotions evoked from images and sound on-screen are incomparable to what is felt in person. One is emotionally removed when safely distanced from an occurrence.

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<sup>14</sup> Pallasmaa, Juhani. *The Eyes of the Skin: Architecture and the Senses*, 46.

# 2

## *To Sense*

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### **Tactility**

The importance of touch is described in *A Natural History of the Senses*. In her writings Diane Ackerman explores how touch has ensured the survival of humans and other species by asserting that without touch, there would be no parenthood or survival:

“If we didn’t like the feel of touching and patting one another, we wouldn’t have sex. Those animals who did more touching instinctively produced more offspring which survived, and as their genes passed, the tendency to touch becomes stronger. We forget that touch is not only basic to our species, but key to it.”<sup>1</sup>

The human evolutionary survival depends on touch; however, an individual’s survival relies on it furthermore. Ackerman asserts that it is possible to function without hearing or vision as those who are concurrently deaf and blind have shown, but being unable to touch is like moving “through a blurred deadened world where you lose a leg and not know it, burn your hand without feeling.”<sup>2</sup> As in a state of paralysis, to be without touch is to be without physicality.

### **Skin Therapy**

Skin therapy has been heavily studied within the past century. Touch is the most crucial sense for our survival and is the sense that most requires stimulation for individual physical growth. Studies have shown that babies who are born in dysfunctional families and are devoid of touch suffer from stunted growth that can only be reversed by physical contact.

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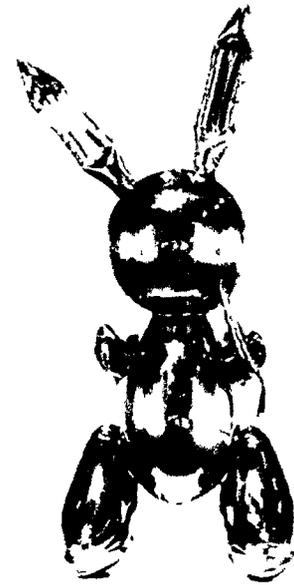
<sup>1</sup> Diane Ackerman, *A Natural History of the Senses*, (New York: Random House Inc. 1990), 77.

<sup>2</sup> Diane Ackerman, *A Natural History of the Senses*, 82.

Like food, physical stimulation is a form of nutrient required to thrive. Ackerman describes how individuals are ‘touch starved’ in our society today as various modes of human contact are deemed inappropriate and taboo. The prevalent use of cribs portrays the modern tendency to value safety over tactility. Ackerman quotes an experimenter who declares that “we raise our children in a non-tactile society and have to compensate with non-human creatures.”<sup>3</sup> *See Fig. 1.*

Textiles, as objects of great emotional attachment, have been used as a tool to alleviate children’s touch starved condition. Ackerman points out that teddy bears, blankets and pets are used to address the situation. Plush toys are a form of textile as they are fabrics of woven knits or of imitation fur, sewn around stuffing and feel pleasant against the skin. Due to their softness, tactility and anthropomorphic form, small children imagine their three dimensional textile sculptures as real beings with feelings. Since a child gets a great deal of comfort from, for example, the stuffed bear, he or she will feel as though they are also comforting to the inanimate object. The skin, as a sensorial device, is most emotional as it provides the connections between humans and objects.

In this light, it is not unusual for young children to form attachments to non sculpted fabrics of comfort such as *blankies*. The attachment that a child has to a blanket may stem from early infancy when a blanket wraps a baby after birth, replacing the embrace of a parent. In this regard, textiles have a great nurturing ability as studies have shown that swaddling a premature newborn in knit wool is just as advantageous as cradling. Ackerman explains how in a maternity hospital in Cambridge, England, premature babies would gain an average



**Fig. 1** Rabbit by Jeff Koonz  
The rabbit, a common plush toy that is soft and textile, is composed of stainless steel.

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<sup>3</sup> Quoted by Diane Ackerman, *A Natural History of the Senses*, 121.

weight of fifteen grams when placed and wrapped in a lamb's wool blanket for a day. Since the ward was kept warm, it was noted that the benefits arose from the tactile stimulation of swaddling which recreates the effects of the mother's womb. This decreases stress in small children making them "feel lightly cuddled."<sup>4</sup>

In regards to stuffed animals, one emotional aspect pertains to how animalistic they are. Stuffed animals are made to look like pets. Pets are shown to be invaluable to a person's health. The leisurely stroking of pets reduces stress and is known to improve the health of former heart attack patients. According to Ackerman, it is the tactile stimulation that promotes longevity.<sup>5</sup> Performed almost subconsciously while engaged in other activities such as talking to a friend or watching television, petting has a healing effect on a person.

Tactile therapy is not only beneficial for one's health, it is universally delightful. This accounts for the human fascination for luxury textiles of the smooth silks, the soft furs, the fine cashmere and the buttery leathers. As textiles, these items are chosen by how sumptuous the texture feels against the skin. The varieties of fabric materials and cuts allow people to select whatever kind of embrace they desire: tight, furry, loose, slinky, etc. Inversely (and crudely), pets (and humans) are raw, living breathing forms of knit and tanned leather textiles. Thus the healing properties of textiles are very similar to the remedy of human or animal touch.

### **The Touch of Scent**

The common perception of 'touch' involves a voluntary action on one's part. Touch is associated with conscious actions. The prevalent existence of rules that forbid contact among individuals and/or objects suggests that individuals are able to control whomever and whatever they choose to touch. For instance, one reaches their hand out and deliberately

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<sup>4</sup> Diane Ackerman, *A Natural History of the Senses*, 78.

<sup>5</sup> Diane Ackerman, *A Natural History of the Senses*, 121.

touches another person; one deliberately chooses to adhere by the rules and avoid contact with the art gallery painting. However, touch is not limited to the voluntary actions of the body. The skin perceives temperature and humidity and responds accordingly in forms of sweat or goosebumps. Furthermore, touching extends beyond the skin. Touching occurs when airborne particles enter the nostril, and touches the olfactory organs, stimulating scent. Occurring through inhalation, the sense of scent is an internalized form of touch.

What is interesting about the word scent is that it is based on the Latin *sentire*, which means to feel, to sense or to generally perceive. In modern day Italian, *sentire* not only means to feel but also to hear. In French, *sentir* carries the double meaning of to feel and to smell, displaying the emotional aspect of scent.<sup>6</sup> The sense of smell is connected to emotions through memory. According to Antonio Damasio, emotion occurs with sensorial perception and with memory. Scent is often the most enduring memory of a space. Juhanni Pallasmaa tells how the “nostrils awaken a forgotten image, and we are enticed to enter a vivid daydream”.<sup>7</sup>

When one enters a cabin, it is the faint smell of wood, wet leaves and moldy walls that connects the individual with the space. Smell often provides a more powerful architectural experience than sight. When one walks into a modernist building that smells of frigid ice, the memory of an ice rink is more pertinent to the individual than the memory of other buildings of similar appearance. Architectural space is often thought of in terms of vision, but it includes a combination of smells – as well as sounds.

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<sup>6</sup> Constance Classen, *Worlds of Sense: Exploring the Senses In History And Across Cultures*, (London: Routledge, 1993), 53.

<sup>7</sup> Juhani Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, 54.

## Muffling Acoustic Touch

Hearing is a form of touch and occurs when sound waves enter into the ear canals. Juhanni Pallasmaa describes how sound is an “onrushing, cresting, and withdrawing wave of air molecules that begins with the movement of any object, however large or small, and ripples out in all directions, thumping against the solid and voids.” This description of sound illustrates how the molecules touch in the form of ‘thumping’. These molecules eventually touch one’s internal hearing devices, making a person aware of the existence of sound. Similar to smell, hearing is for the most part, an involuntary sense. However, one is able to control the volume of sound through the act of muffling or blocking - for example, when an individual places a piece of fabric, such as a hat, over the ears.

The interaction between sound and textiles is most distinct. While fabric increases tactile and olfactory stimulation by caressing the skin and containing scent, fabric serves to muffle the sense of sound. It may seem rather obvious in noting that carpeted flooring is softer sounding when treaded upon than all other materials. Textiles are able to control the volume of sound. This property is especially important in quieting undesired technological noise. For instance, at the awakening of a loud alarm clock, individuals who want to continue sleeping pull a blanket over their head, stifling the noise. The space underneath the blanket covers create for audio tranquility.

Sound allows for the articulation of spaces. Buildings possess resonance through poetic compositions of stone, wood and metal. Through intimate spaces such as courtyards, reverberations are contained within, allowing the materiality of the architecture to chant the aura. Stone in particular, returns sound. Its echo bounces along the wall carving out space and material solidity without use of sight. The volume of these echoes can be controlled with fabric which can increase or dampen sound: gradually releasing cloth over the surface of the stone walls will slowly diminish the echo, while unveiling the fabric over the stone walls

will increase the sound, creating a crescendo. Thus, the use of fabric in architectural spaces can allow for dramatic effects.

The modern North American city is muted in its spatial arrangements. As previously mentioned, a large number of buildings are constructed as solitary objects within a void. Thus the natural sound of material, (as few and far between) are further lost to technological noise. The muted contemporary city is smothered by the noises of the industrial age. The loud humming of the building mechanical systems allies with the violent vibrations of traffic to cloud the silence of the sparse outdoor spaces. This is a pity because natural sounds are comforting: the sound of rain on glass or metal roofs, the sound of door handles locking into place. People often refer to the sound of silence as one that is desired – ‘we just want to get away from all the noise and go to the cottage where it is silent’. However, the desire of silence is the desire for the ability to listen to the quiet natural sounds that are lost in cities.

Within indoor spaces, the sound of silence is diminished. Technological advances have fostered the repetitive trends of recorded music to permeate public interiors, obliterating the inherent echo of the space. It is common for individuals to transit with their earphones on, losing track of the acoustics of their surroundings. In Arabic, the word *absurd* means being unable to hear, as without it, you “lose track of life’s logic.”<sup>8</sup> A film ‘makes more sense’ when it is heard but not seen, than when it is seen but not heard. Sound, as the sense related to speech, is a social sense that creates a sense of connection and solidarity.<sup>9</sup>

### Cultural Sense

Constance Classen maintains in *Worlds of Sense* that the senses are developed culturally. Classen demonstrates how different cultures have different sensory orders and states that

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<sup>8</sup> Diane Ackerman, *A Natural History of the Senses*, 175.

<sup>9</sup> Juhani Pallasmaa, *The Eyes of the Skin*, 50.

“our time honored notion of there being five senses is itself a cultural construction.”<sup>10</sup> For example, in the Buddhist cultures, the mind is the sixth sense and one Nigerian culture divides the senses into two: visual and non visual senses. In *The Eyes of the Skin*, Juhani Pallasmaa illustrates how essentially there is only one sense – touch. He describes hearing as the touch between auditory vibrations and the ears, sight as the touch of light with the retina, smell as the contact of tiny molecules with the smell receptors and taste occurring when the food touches the taste buds of the tongue.<sup>11</sup> Thus the concept of the five senses are challenged in light of cultures who perceive the world through two, six or even one sense(s).

### **Cultural Scent (And all its Pleasures)**

Scent is identified as the primary sense of humans. Classen describes the case studies of three feral children who were devoid of societal conditioning: a girl in India found in a den of wolves, a German boy found in a prison cell with little human contact and a boy found in France in the wild. In all three cases, the children had an extraordinarily keen sense of smell. This supports the notion that “smell is of great importance to humans by nature and it loses its significance only when suppressed by culture.”<sup>12</sup>

The Western cultural preference for the eye suppresses the body’s dependency on smell. However, the decadent pleasures of life are all attributed to smell; the “temptation of food, the sweaty funk of sex, the essence of a walk on the beach and the feeling of nostalgia,”<sup>13</sup> are all scent-based pleasures. These pleasures can calm and comfort an individual during duress. Thus, the elimination of smell results in one’s loss of taste, sensuality and appetite, thereby reducing one’s ability to feel comfort during times of distress. In *The Scent of Desire*, Rachel

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<sup>10</sup> Constance Classen, *Worlds of Sense*, 2.

<sup>11</sup> Juhani Pallasmaa, *The Eyes of the Skin*, 42.

<sup>12</sup> Constance Classen, *Worlds of Sense: Exploring the Senses In History And Across Cultures*, 45.

<sup>13</sup> Rachel Herz, *The Scent of Desire*, 2.

Herz speculates the suicide of Michael Hutchence, the lead singer of the popular Australian band INXS as one brought on by the loss of scent. In September of 1992, Hutchence was struck by a car and suffered from a fractured skull and damaged olfactory organs. Following the accident, Hutchence reportedly suffered from depression. According to accounts from a close friend, Hutchence, who was a sensual and hedonistic being with a “lust for life that were centered around consumption”, had an emotional breakdown in a bar a few months prior to his death where he confessed, “I can’t even taste my girlfriend anymore.”<sup>14</sup> Herz’s speculation portrays an example where scent is imperative to one’s desire to live because it links to pleasure. The purpose of this case study is to highlight the importance of smell as it is currently insignificantly valued.

### Scent of Identity

The inability to detect odours not only robs one’s sense of delight, but also robs one’s ability to identify. Individuals who are unable to smell complain of their inability to know whether something is wrong. Scent enables you to identify between edible and stale food. In addition, signs of bodily wellness and illness are detected through changes in smell.

The connections between illness and scent are more apparent among non Western cultures. Classen highlights how the Warao of Venezuela holds that odours are airy spirit like beings that travel in the wind, attaching themselves to objects, spaces and beings. Illness occurs when these foul odours attach to a person; alleviation can only occur by administering curative fragrances.<sup>15</sup> For the Warao, these foul odours are the causes of death.

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<sup>14</sup> Rachel Herz, *The Scent of Desire*, 2.

<sup>15</sup> Odours are individually seen as entities of otherness: foul odours originate in the western land of the dead and pleasant odours with the eastern land of godly life. (Constance Classen, *Worlds of Sense*, 95.)

All living matter gives off a particular odour expressing its identity. With the advent of death, the unique odour of a person is gone, and replaced with the stench of death. With death and decay, the body becomes the “other”.<sup>16</sup> The scent of the deceased, which was once familiar is now unfamiliar. The individual scent of a person is important to one’s identity. With the loss of scent, every individual will smell identical – odourless. Classen identifies how in many foreign and older cultures, to be devoid of odour was an even greater misfortune than to give off foul odour.<sup>17</sup> As scent was associated with identity, to be without scent was to not have any identity and to not exist.

The parallels between life and textiles are discussed earlier in this chapter through analyzing touch. These connections can be further addressed in olfactory terms. Fabric has the ability to contain scent beyond all other built material, and therefore has the ability to acquire ‘life’. The parts of a human that best soak up scent are hair and fabric. For instance, when one enters a pungent restaurant, it is their clothing and hair that smell of kitchen cooking spices for the rest of the day. This is due to the properties of fabrics which contain many small pockets that trap the scented air. Thus, to place perfume on a piece of fabric increases the intensity of the fragrance.

A individual’s natural scent is entrenched in his or her clothing. The fibers of the textiles soak up the sweat, pheromones and identity of an individual. “According to the Bible

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<sup>16</sup> The notion of the *other* is important on the subject of social familiarity and social groupings. Different social or racial groups who are accorded as different varieties of otherness are labeled according to an olfactory scale. People are unable to smell their own scent that they have grown accustomed to, which brings us to the notion of the ‘other’. In his writings, *Orientalism*, Edward Said states that we cannot define ourselves without the other. Therefore, the fragrance of the prevailing culture is regarded with stench-less normalcy. Only with the nose of another culture can the scent of a group be defined. Classen describes how this is evident among Western white cultures where, in a time before political correctness, blacks, immigrants and the lower class are associated with offensive odours. Other groups in turn, are apt to associate Caucasoid people with a certain unpleasant odour. Constance Classen, *Worlds of Sense*, 94.

<sup>17</sup> Conversely, in our western society, to “smell” is considered offensive. Individuals go to great lengths to avoid smelling in western society, which, as a tribute to the sterile machine, prefers the scentless disodourate. Constance Classen, *Worlds of Sense*, 94.

account, when Isaac grew old and lost his sight he called his son Esau to kiss him and receive a blessing, but Jacob put on Esau's clothing and because he smelled like Esau to his blind father, received the kiss instead."<sup>18</sup> In this story, Jacob's identity was masked by Esau's scented clothes, thus displaying the olfactory power of fabric.

In contrast to fabric, the material palette of buildings today consists of the least odorous of materials. The constructs of these materials such as glass, steel and concrete are used to accommodate sterile objects such as televisions and computers which are expressively devoid of odours. Sterility refers to an aseptic condition – an absence of microbiological living things.<sup>19</sup> As biological materials produce a particular odour of life and decay, the state of sterility is associated with the disodourate. According to Classen, machines represent the disodourate, not only through their material makeup but also symbolically: "The robot is neither fragrant nor foul. It's otherness not simply of anti-culture but anti-life."<sup>20</sup> The realm of the machine, which composes a large portion of our built environment, lacks the scent of identity, culture and the biological cycle of living and decay.

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<sup>18</sup> Diane Ackerman, *A Natural History of the Senses*, 111.

<sup>19</sup> Sterile can also refer infertile - the state of being unable to reproduce.

<sup>20</sup> Constance Classen, *Worlds of Sense*, 94.

## The Remedy of Textiles

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With the desensitizing in architecture that occurs today, it is evident that a remedy for this situation is necessary. Architectural desensitization can be addressed through the remedy of textiles. Fabrics have the capability of stimulating the non-ocular senses such as smell, sound and especially touch. Therefore, its use can add “coziness” to a deadened space. In his writings, *Spoken Into the Void*, Adolf Loos comments on the coldness of the new trend in architecture at the turn of the century:

“But the rooms of these architects had one flaw. They were not cozy enough. They were naked and cold. Where there had been fabric before, now there were only profiles, columns and cornices.”<sup>1</sup>

In this statement, it is fabric that creates coziness and comfort. The architect is separated from the upholsterer, his fabrics and all that is comfortable. Contemporary architecture in itself is incomplete. See Fig. 2. On its own it is uncomfortable unfashionable and un-human. Coziness and comfort are identified with fabric. Devoid of comfort, the American home in particular is heavily criticized as “not a house but the scaffold for furnishing.”<sup>2</sup> Essentially if one were to personify the terms, *Architecture* has lost her



Fig. 2 The incomplete modern home.

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<sup>1</sup> Adolph Loos, *Spoken Into the Void: Collected Essays 1897 – 1900*, (MIT Press, 1982), 20.

<sup>2</sup> Gottfried Semper. *Style in the Technical and Tectonic Arts; or, Practical Aesthetics*, (Getty Research Institute, 2004), 219.

abilities to soothe as she willingly assigns *Furniture* the task that was originally hers. Mass produced around the world, the contemporary home is a barren shell.

### **Textile as the Beginning of Building**

The study of textiles is a wide-ranging subject which branches into social history, archaeology, anthropology, art and design.<sup>3</sup> Textiles<sup>4</sup> do not only encompass fabric products used for furnishings and dress, but more importantly involves the techniques required in manufacture (textile-making).

It is important to look at the architecture of other cultures, whether it is ancient or foreign, and their use of textiles. Upon the observation of cultures that have a different sensory order than that of the modern West, it is noted that their built world is not only more tactile but also more 'textile'. This brings us to the notion that architecture evolved from textiles since the sensory orders of prehistoric cultures were less ocular-centric.

The notion that architecture today originated with textiles is supported by Gottfried Semper who states that "It remains certain that the beginning of building coincides with the beginning of textile"<sup>5</sup>. In *The Four Elements of Architecture*, Semper considers the knot as the first architectural element, and the developed method of textile making, for use of spatial divider and covering, as the earliest form of space making.<sup>6</sup> In the manner of textiles, early

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<sup>3</sup> Jennifer Harris, *5000 Years of Textiles*, 7.

<sup>4</sup> Mary Schoeser in *World Textiles* points out the connections between textiles and writing stating: "with or without inscriptions, textiles convey all kinds of 'texts'." <sup>4</sup> Textiles display the creative vocabulary of fibers, dyes and technique. Poetically, textiles communicate the ways in which they are manipulated and layered, thus displaying the sensitivities of tradition of the last thousands of years.<sup>4</sup> In a more literal term, textiles have a long tradition as a communicative art medium. Regarding the content of textiles, embroidered tapestries are composed in the manner of a painting and are laden with symbolism and meaning.<sup>4</sup>

<sup>5</sup> Gottfried Semper, *Style*, 254.

<sup>6</sup> Gottfried Semper, *Style*, 247.

architecture mimics nature through imitation of plants and animals. His following statement “the transition from plaiting of branches to plaiting of basts [was] easy and natural”<sup>7</sup> reflects that textiles have also shared their origins with architecture through the mimic of nature.

Subsequent to Semper, Adolf Loos contends that the oldest architectural detail is cladding.

“In the beginning was cladding. Man sought shelter from inclement weather and protection and warmth while he slept. He sought to cover himself. The covering is the oldest architectural detail. Originally it was made out of animal skins and textile products.”<sup>8</sup>

Loos’ statement asserts that cladding derived from clothing. This can be traced through Germanic etymology. The term *die wand* implies enclosure and is related to *gewand* which translates as dress, highlighting the congruent nature of cladding and clothing.<sup>9</sup> The primacy of cladding can be visually expressed by Bernard Rudofsky’s who thinks of architecture as “nothing more than a second layer of garment.”<sup>10</sup> Traces of textiles are still evident in the cladding of architecture today. Contemporary writer and architect, Kenneth Frampton commented on how Semper viewed the facing brick or tile of modern cladding as “a dressing, a kind of petrified fabric and hence a transformation of nomadic textile forms into a more permanent material.”<sup>11</sup>

Cladding or cloth represented one of the main types of architecture. In classifying the four main architectural elements, hearth, earthwork, framework and membrane, Semper further

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<sup>7</sup> Gottfried Semper, *Style*, 254.

<sup>8</sup> Adolph Loos, *Spoken Into the Void: Collected Essays 1897–1900*, (MIT Press, 1982), 66.

<sup>9</sup> The connections between architecture and textiles brings forth Semper and Loos’ notion of the carpet as a means of vertical divider. Therefore in early architecture, the carpet which is obviously textile was utilized as an architectural wall. Loos in particular describes early architecture as a three dimensional arrangement of carpets with four tapestries as walls and one for the floor. Thus, the framing of the surfaces are secondary. This is antithetical to the *Primitive Hut* of Marc-Antoine Laugier which portrays the first example of architecture as a structural wood framing devoid of cladding.

<sup>10</sup> Lessons from Bernard Rudofsky, (Basel: Architekturzentrum Wien Birkhäuser, 2007), 274.

<sup>11</sup> Kenneth Frampton, *Studies in Tectonic Culture*, 87.

groups the two primary archetypes as the hearth (*urherd*) - a purveyor of heat, and the cloth (*urtech*) - a shelter to contain heat, stating it as the first mark of civilization and the first fabrication.<sup>12</sup> Commonsense allows for heat and shelter to be regarded as the main requirements of architecture, connecting architecture to clothing which is pragmatically worn for heat and shelter.

The importance of heat and shelter are expressed in the word ‘cozy’, which is often associated with comforting warmth. An individual wrapped in a knit shawl will appear cozy. What is interesting about the term cozy is that it does not only refer to comforting warmth but also defines a noun. The cozy (noun) is defined as a padded covering for a pot to retain its heat. Originally, cozies usually refer to tea cozies. However, the definition has loosely developed to encompass a myriad of textile coverings for inanimate objects that require protection. See Fig Xx. Thus, the term cozy is a literal connection between comfort, warmth and textiles.<sup>13</sup> Essentially, architectural cladding can be seen large scale spatial cozy.

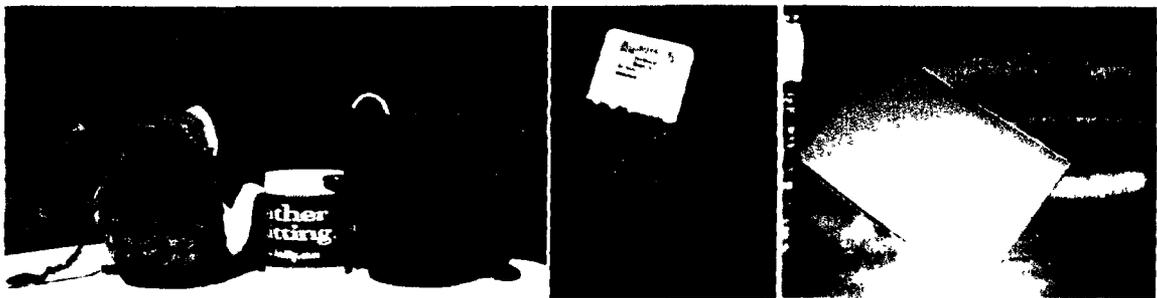


Fig. 3 Tea Cozies, Ipod Cozy and Laptop Cozy

There are many cultures who view architecture in the manner of a large item of clothing and the boundary between clothes, accessories and habitation are unclear. In observing the lifestyles of various nomadic communities, Rudofsky notes that “Empty baskets may double as cover against the elements, portable roofs become umbrellas, and vice versa.”<sup>14</sup> An

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<sup>12</sup> Kenneth Frampton, *Studies in Tectonic Culture*, 88.

<sup>13</sup> Another term that connects textiles, warmth and comfort is the word *comforter*, which refers to a thick padded blanket that provides warmth.

<sup>14</sup> Bernard Rudofsky, *Architecture Without Architects*, 139.

emotional and personal response to architecture as dress is seen through the cultures that view the habit of purchasing a second hand home as absurd, as described by Rudofsky in his publication *Architecture Without Architects*.<sup>15</sup> When the time comes to relocate for the rural people of Guinea and Vietnam, the home is either rebuilt or taken apart in fragments and transported to the new desired setting. See Fig 4. The home is not seen as a 'scaffold for furniture', but rather as a spatial object of great emotional significance and identity, that the thought of occupying another's home or leaving someone else with your home is inappropriate.



Fig. 4 The home is taken apart and transported in fragments in rural Vietnam.<sup>16</sup>

### The Living Textile

What is perhaps most interesting about textiles is the fact that the weave is comprised of living material. Even the synthetic textiles mimic components of plant or animal. Evidence shows that the earliest materials manipulated into textiles were grasses, reeds, sapling rods,

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<sup>15</sup> Bernard Rudofsky, *Architecture Without Architects*, 139.

<sup>16</sup> Bernard Rudofsky, *Architecture Without Architects*, 142.

bast fibres and animal gut.<sup>17</sup> A variety of textiles such as wool, goat hair and pony hair are animal products. Diane Ackerman in her writing *The Natural History of the Senses* regards hair as symbolic of life because it “bolts from our head [and] like the earth, it can be harvested, but will rise again.”<sup>18</sup> Humans have teased and worked with hair to create variations of forms. One example of teasing is felting, which imitates animal pelts and tree bast. Felt is a tangled mass of light and supple hair that provides great insulation against the cold.<sup>19</sup>

In addition to hair, humans have made use of the internal fibers of animals. In *World Textiles*, Mary Schoeser comments on how sinew and gut were twisted to form thread. Today, the Samis of Lapland “still make fine threads from twisted strands of reindeer sinew.”<sup>20</sup> Since textiles are comprised of organic matter they “begin to deteriorate from the moment they are made up” as “light and the environment weakens the structure of the fibers.”<sup>21</sup> Textiles age and are subject to their own death by disintegration. Fabric is either composed of, or mimic hair.<sup>22</sup> It is these properties that make textiles unsterile. As a component of the living, textiles greatly contrast with modern materials of glass and steel.

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<sup>17</sup> Bast fibers found in the form of three ply cords, bast nets, and linden basts have been found in southern France, Finland and Northern Europe dating from 18,000 BC to 4000 BC. The prevalent plant basts and nettles are treated similarly. The plant is dried out, remoistened and dried again and then the residue fibres of the stem-rind is then extracted through breaking and combing. Mary Schoeser, *World Textiles: A Concise History*, 13.

<sup>18</sup> Diane Ackerman, *A Natural History of the Senses*, 84.

<sup>19</sup> Gottfried Semper, *Style in the Technical and Tectonic Arts; or, Practical Aesthetics*, 226.

<sup>20</sup> Mary Schoeser, *World Textiles: A Concise History*, 12.

<sup>21</sup> Jennifer Harris, *5000 Years of Textiles*, 8

<sup>22</sup> Hair can be structural. The plaiting or braiding of *hair-like* threads combines and increases its strength producing a useful rope for the heaviest of tasks. Plaiting remains as the best way to unite multiple wires into one. Semper marvels at the beauty and strength of the plait stating that there is “good reason that the mother of the human race probably chose it as a hair adornment.” Gottfried Semper, *Style*, 220.

## Temporality and Mobility

The materiality of textiles allows for temporality, a quality that invites touch to allow change. Interactive elements such as doors, moveable walls and curtains are all tactile as they require the touch of the hand and/or the weight of the body in order to be utilized.<sup>23</sup> These mobile elements are modern forms of flexible textiles which have been replaced by fixed solid materials attached to hinges. Thus, the hinge is a most important temporal element. It is the hinge itself that allows for mobility.

Textiles that are knitted have the ability to clinch, shrink and mold to a particular form.

Knits have been marveled by Semper who declared that “elasticity and ductility are the specific advantage of these products, for which they are especially suited for close-fitting dresses embracing and rendering the form without folds.”<sup>24</sup>

Knits, and for that matter, all fabric, are naturally in a state of deformation. A two dimensional cloth will form over a three dimensional shape. The beauty of fabric is that it is fluid and takes on the shape of the structure or surface it is placed on. There are a variety of textiles, those which are elastic and those which fold. Rudofsky has marveled at the ancient Greeks who have found beauty in the folds of cloth, accentuating the grace of the unstructured deformity: “for nine centuries the most beautiful garments did not belong to those who had the best tailor but to those who were most skilled at draping themselves.”<sup>25</sup> The Greeks used the versatility of the uncut cloth to their advantage. The cutting of cloth

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<sup>23</sup> One example that displays the evolutionary connection is located in the Far East. Semper contends that Chinese architecture stood still since primitive times as the four architectural elements (the roof, enclosure, mound and hearth) have most clearly remained separate from one another. The partition wall, which is for the most part movable, retains its original meaning as a vertical carpet independent of the roof and masonry wall. The moveable partition walls display the historical use of mobile carpet hangings to create temporal spaces. Gottfried Semper, *Style*, 226.

<sup>24</sup> Gottfried Semper, *Style*, 219.

<sup>25</sup> *Lessons From Bernard Rudofsky*, 274.

and the fixing of it into rigid forms destroy the art of drapery, of one dressing oneself. The process of pattern cutting from one piece of cloth accrues waste. As the Greeks favoured lighter drapes of fabric that flowed, the civilizations of the East preferred dense, heavy silk of “stiff and angular drapery that ran counter to the Greek principles of dressing.”<sup>26</sup>

According to Rudofsky, modernity’s wardrobe as one “tailored according to a pattern derived from anatomically fitting clothes”<sup>27</sup> transcends from the fashion of the “barbarians” that conquered the classical civilization. The barbarians wore tight fitting dress derived from hunter apparel made from irregular shaped furs and animal skin. In order to accommodate contours of human form, the material had to be joined as typical hollow form. This cutting eradicates the versatility of that cloth, ultimately increasing discomfort at the event of mobility or size change.

### **The Culture of (dis)Comfort**

Just as textiles have the ability to provide comfort, it has the ability to cause ailment. This is evident in various cultures that utilize textiles to deform the body into an ideal beautiful form, thereby producing ailment.<sup>28</sup> What is interesting about the notion of ‘comfort’ is that it is entwined with the cultural complexity of the emotional sense of identity. An individual will say that they feel more ‘comfortable’ in something that best projects their identity. The concept of comfort is one that is socially / culturally acquired. Therefore, it is possible to feel comfort in physical pain. For example:

A woman who wears sweatpants in the living room is physically comfortable.  
The same woman who wears sweatpants to the office feels uncomfortable.

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<sup>26</sup> Gottfried Semper, *Style*, 201.

<sup>27</sup> Bernard Rudofsky, *The Unfashionable Human Body*, 155.

<sup>28</sup> One extreme example of fabric deformation is foot binding which was commonplace in Old China, where small symmetrical feet were considered ideal. With foot binding, the cloth is tightly wrapped around a child’s foot, forcing the growth to deform inwards. Another example of this is the Western corset, which was also implemented on young girls. (Bernard Rudofsky, *The Unfashionable Human Body*, )

A fashion forward woman who walks around in three inch heels is painfully comfortable.

The same woman will feel uncomfortable in cushioned sneakers.

The first example portrays an example where comfort and identity are dependent on one's context. This is because the sense of comfort can be associated with one's projection towards others. There is great discomfort in feeling inappropriate. For instance, one will not want to attend a funeral in disrespectful dress, otherwise he or she will feel rather uncomfortable.

Coziness has places where it is appropriate. During the melancholy times of death, individuals often find comfort in crying. However, they are unable to seek comfort in their office spaces, which, as a place of work is not a space for individuals to grieve. Spaces of grievance and comfort are available within the home and the funeral home, where one can express their emotions without feeling self-conscious.

### **A Textile of Consciousness**

An assessment of feelings and emotions portrays that consciousness is the link to all those things that make us *especially* human. It is "only along with the advent of a sense of self" that the internally directed feelings produce the externally directed emotions.<sup>29</sup> The act of textile dressing is the definitive of sensing self. Individuals do not dress their self unless they are able to perceive their self. Undoubtedly, the use of textiles stem from the unique nature of human emotions entwined with the sense of self.

There is a narcissistic awareness within the act of dressing. The act of draping is an art form that requires the daily transformation of two-dimensional cloth into the three dimensional drapery, employing daily inventiveness and ingenuity. Tactile stimulation is one of the benefits of the art of dressing. While dressing, the hands come into much contact with the

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<sup>29</sup> Antonio Damasio, *The Feeling of What Happens*, 36

fabric material. The hands manipulate and make decisions regarding personal preference. This act can be replicated via architectural implementations through elements such as fabric curtain, walls flooring and roofing. With the use of fabric, individuals are able to dress their space.

### The Motion and Emotion of Textiles

Regarding movement, the lightness and deformed quality of textiles enable the material to flutter in the wind. This is an example of how correlation of motion and emotion goes beyond the previously mentioned metaphor of emotions as “natural forces”. First and foremost, emotions are rooted within consciousness - a sense of self that is actually quite fluid. According to Damasio, the brain reconstructs its sense of self with each passing moment. He states that “we do not have a sense of self sculpted in stone.”<sup>30</sup> In addition, emotions are the necessitate accompaniment of thinking about one’s surroundings. It is established that



Fig. 5 Nike of Samothrase.

emotional response occurs with physical sensation. However, it is the movement, the scales of changes within a physical sensation that produces the most feelings and thus, emotions. This applies for all the senses. A single note heard through the ear canal does not lend to music alone, it is the movement and rhythm of scale, the crescendos and pauses that produce

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<sup>30</sup> Antonio Damasio, *The Feeling of What Happens*, 144.

the emotional feeling. Regarding sight, movements such as the fluttering and dancing are especially emotional.

It is interesting to note the correlations between gravity, wind and emotions. As stated earlier, the etymology of emotion has its roots in the metaphor of a natural force such as a gust of wind or a storm. The interplay between wind and objects allows for great emotion. One of the most emotional scenes of the Sam Mendes' film *American Beauty* involves the movement of a paper bag curiously dancing in the wind. Flags, which are limp and lifeless in a stationary setting, become loaded with emotion as the fabric flicker and flaps. Against the wind, textiles come alive. The connections between gravity and deformity were mentioned in the comparisons between the Greek form of drapery and the modern tubular forms today. Greek sculptures are expressive with their asymmetrical contrapposto stance, and flowing fabric. See Fig. 5. The symbolism of life and virility can be detected through the drapery of the cloth alone.

### **The Textile Identity**

The use of textiles is something that is emotionally and intrinsically human. Human cultures around the world have fabricated textiles and have worn clothing in one manner or another.<sup>31</sup> The distinctly human nature of clothing is connected to the unique nature of human emotion. In *The Unfashionable Human Body*, Bernard Rudofsky's contention that clothing is not worn as a modest veil but rather as a sexual stimulus, highlights the issue of why humans even wear clothing at all. In his writings, he explores how ornaments and clothing were used in various cultures to *emphasize* sensuality.

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<sup>31</sup> This brings us back to the notion of textiles and humanity's use of it as something that makes us human. Non-human species do not engage in dress as they do not possess a complex level of emotions and self awareness.

Rudofsky discusses how the habit of decorating the body and/or wearing clothing is due to the fact that the nude body on its own is unfashionably incomplete. Emotions have helped shape humanity's dissatisfaction towards their own skin and this is expressed in inexhaustible change through the use of clothing. The emotional bond individuals have with their worn textiles begins with first, a "stirring of timid desire for the adoption of a fad; the intense devotion to it while it lasts; the sudden boredom and physical revulsion for an outlived vogue."<sup>32</sup> This statement appropriately describes the intensities of one's love for clothing in the manner of fleeting love affairs.

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<sup>32</sup> Bernard Rudofsky, *The Unfashionable Human Being*, 13.

## Fabrics of Death

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### The Textile Response

Worn textiles are particularly laden with emotion. Dress is such an inherent part of all individuals, who are remembered for their clothing<sup>1</sup> and hairstyle<sup>2</sup> just as they are their body. As clothing is part of a person's identity, whatever personal feelings you have to a particular being, you will have extended your feelings towards their clothing, whether consciously or not.

Emotional attachments to clothing are expressed in numerous films and novels. One example lies within a scene at the end of the film *American Beauty* where the actress Annette Bening, upon finding the bloodied corpse of her husband, enters his room, opens the closet and breaks down while clutching his hanging garments. The further portrayal of how clothes are laden with emotional meaning is evident in Russell Banks' novel *The Sweet Hereafter*, where the husband of a dying woman responds emotionally to her clothes:

“I remember one night shortly after my wife, Lydia went into the hospital to stay, I gathered up all her clothing and spread it across our bed – dresses, blouses and skirts, jeans and shirts, nightgowns, her underwear, even – and folded everything neatly and boxed it and carried the boxes out to the garage, where we have a storage room in back. I don't know why I did that; she hadn't died yet, although I knew of course that in a few weeks at most she would be dead from the cancer. But I could not bear to look at the clothes hanging in our closet or see them whenever I opened

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<sup>1</sup> Among social groups, dress is the cultural identifier of status, occupation, gangs, and social cliques. In countries with a large population from other cultural backgrounds, dress is the visual indicator of whether immigrants assimilate with the mainstream or remain a cultural other. (Diane Ackerman, *A Natural History of the Senses*, 85.)

<sup>2</sup> There are obvious connections between identity and dress and identity and hairstyles. Hairstyles are in essence an aspect of dress as one dresses their hair. Ackerman describes how: “One's hairstyle can be the badge of a group, as we've always known – look at the military's crew cut, or the hairstyles worn by some nuns and monks.” This illustrates how hair differentiates people. (Diane Ackerman, *A Natural History of the Senses*, 85.)

a dresser drawer; I could not bear even to walk past that closet or dresser and know that her clothes were inside, hanging or neatly folded in darkness like some foolish hope for her eventual return.”<sup>3</sup>

As illustrated in this text, at the event of death, it is difficult to deal with the garments of a loved one. Both the act of discarding and retaining one’s clothing can be upsetting. Thus, in Western societies, the memory of a person following death is often preserved through memory quilts. The clothing of a person is cut up into patterns and sewn together to form a quilt. The quilt is laden with memories of a person: the scent or essence remains in the fibers, diffusing memories into the air; visually each cut is of an individual garment which contains particular memories. These cuts are collaged into a multi-sensorial memory quilt sutured together to represent the person’s life and expression.

### **Death, Textiles, and the Desire for Comfort**

Death and mourning have involved many rituals using cloth.<sup>4</sup> Various cultures have seen cloth as the binding thread of the generations. The shrouding of the body is important for the passage into the afterlife. Shrouding preserves the body. Thus, the specific rituals required to shroud the corpse are of utmost importance.

In Chinese tradition, shrouds are purchased before one’s death and incorporate tradition with comfort. This was superstitiously linked to longevity. Chinese shrouds are often

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<sup>3</sup> Russel Banks, *The Sweet Hereafter*, 42

<sup>4</sup> Death ceremonies and grieving are accompanied by a chromatic colour scheme expressed in the form of textiles. Colours exploited at the event of death are white, yellow, violet and Black. Colours are often symbolic of the physical rot of decay, are religiously rooted, or based on the fear of the return of the dead. White is the colour of death in the Far East, where, during funeral ceremonies, the mourners dress in white to signify that they are mourning. In the West, the use of black textiles is based on the belief that “cloaked or veiled in hue, human beings were invisible to the spirits and thus free from any possibility of molestation.”<sup>4</sup> (Puckle, *Funeral Customs*, )

accompanied by hats, pillows and mattresses. Thus it is desired for the corpse to lie in a state of comfort. In Western traditions, comfortable lavish coffins are purchased to accommodate the corpse. The family of the deceased prefer to see their dearly departed in a comforting resting state because it is less upsetting than otherwise.

## Grief

In his writings *Funeral Customs the World Over*, Habenstein considers “shock”, “grief”, “ceremonial”<sup>5</sup> and “memorial”<sup>6</sup> as terms of universal significance in regards to death. The first two terms are emotional experiences, whereas the latter two terms are expressions. These experiences and expressions are cultural and vary greatly from region to region. Furthermore, within a cultural group, individuals have their own method of mourning. Regardless of culture, during times of grief, people are either left in a state of sensorial numbness or violent surges of emotions where the body undergoes intense distressing episodes.<sup>7</sup> It is during these states of mourning that individuals most require comforting environments.

Each individual responds to grief differently. Individuals react to death in unique ways according to their personality and character types. Thus, there are a variety of ways in which mourners can be comforted. Individuals can feel a sense of guilt. Habenstein expresses how the thread of guilt is apparent in the practices of many cultures during death: ceremonial practices are an opportunity for mourners to pay their debt. In these cases, the feeling of ease

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<sup>5</sup> Funerary ceremonies are universal to all cultures that humans are considered ‘beings who buries his dead ceremoniously,’ therefore the word human is rooted in the idea of burial as animals do not bury essentially their dead.<sup>5</sup> The word *human* is derived from the Latin word *humanus* which is rooted in the word *humus*, meaning the earth. It is important to note that *human* is within the word *inhumation*, which is defined as the act of burying the dead within the earth. (Habenstein *Funeral Custom the World Over*, 767.)

<sup>6</sup> Habenstein, *Funeral Customs The World Over*, 768.

<sup>7</sup> Antonio Damasio, *The Feeling of What Happens*.

and comfort are attained through self punishment.<sup>8</sup> Other mourners may sense feelings of victimhood because their loved one was taken away. Regardless of differences, each mourner requires a coping mechanism that provides for their own method of comfort.

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<sup>8</sup> Habenstein, *Funeral Customs The World Over*, 768.

## The Emotions of Grievance and Comfort

### The “Funeral Home”

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#### The Ottawa (Multi)Culture

The ethnic profile of Canada at the beginning of the 21st Century shows a nation that has become increasingly diverse in its ethnic and cultural composition.<sup>1</sup> This greatly affects the Funeral service industry as funerary ceremonies are highly rooted in religious and cultural customs. In a multi-cultural city as Ottawa Ontario, the question of culture is pertinent for building designs that hold ritualistic ceremonies. As the nation’s capital, Ottawa is the fourth largest city in Canada, and in 2007 held a population of over one million. Given its population, there are currently over 40 buildings specialized in funerary services within the Ottawa-Gatineau region.<sup>2</sup> However, the majority of these buildings are laid out in a traditionally North American manner. Within these spaces, the funeral ceremonies of immigrant cultures, who make up a significant portion of Ottawa’s population, are minimally accommodated for.

In Canada, the Chinese make up the highest percentage of recent immigrants. According to Statistics Canada, the “People’s Republic of China was the leading country of birth among individuals who immigrated to Canada in the 1990s.”<sup>3</sup> The site of this project is within a 15 minute walking distance from Somerset Chinatown. Thus, my thesis presents a building that is first and foremost designed for the Chinese immigrant culture of Ottawa. The prominent use of movable fabric within the interior of the funeral home, however, allows for flexibility of space to accommodate other cultural services.

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<sup>1</sup> <http://www12.statcan.ca>

<sup>2</sup> There are over 40 locations, fewer if franchises were counted as one.

<sup>3</sup> <http://www12.statcan.ca>

In Canada, Chinese immigrant rituals do possess varying levels of Western influence. In Chinese tradition it is common to carry out much of the funeral pre-procession rituals within the home. However, in North America, funerals are conducted in a specialized funeral home because it is undesirable to have death and decay pollute one's home. Habenstein describes how Western culture aims to improve the aesthetic quality of the funeralization by surrounding the ceremony with comfort, quiet and beauty.<sup>4</sup> Correspondingly, the average North American Chinese immigrant does seek the services of Canadian funeral homes, desiring their own Chinese ideals of comfort and beauty. However, the funeral homes available today are of traditional Canadian layouts and do not accommodate for many Chinese traditions.

### **The Site**

The design of this thesis is located at 1 MacFarlane Ave., Ottawa Ontario. Its surroundings comprise of a park, detached single family residential homes of middle to upper class range, and the adjacent 417 highway, which provides a backdrop to the site. The land is a rectangular field of green grass surrounded by trees that create a slight barrier with the highway. The premises are currently used as a lawn bowling field. Due to the weather-dependent nature of lawn bowling, the premises are locked for 8 months of the year. It is within these parameters that I propose the design for my thesis.

### **The Site + Typology in Deformation**

This design investigates the properties of a piece of fabric on a variety of levels. As a piece of fabric is naturally in a state of deformation, it is my aim to create a building that maintains this important quality of fabric, thereby communicating the influence of textiles on this

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<sup>4</sup> Habenstein, *Funeral Customs the World Over*, 767.

project. A building that is orthogonally shaped does not exploit the flexibility of, for example, a cladding of shingles. The process of this project begins with a form that sets the basis of my design. In the nature of a piece of fabric, the presence of a form is necessary in order to deform. Specific deformations are necessary to allow for the building to modify into a more suitable design for its site. Thus, my project utilizes an Eastern typology that does not physically nor programmatically apply to its current Western site. The form chosen will require necessary physical and programmatic deformations in order to fit into the site's physical and cultural settings.

As the building is designed for the purposes of Chinese death ceremonies, the template of the building shall borrow from the typology of a typical Chinese temple. Chinese temples hold Buddhist, Taoist and Confucian practices. In addition, the prevalence of clan temples are also apparent. Due to the ancestral importance of Chinese belief, clan temples house altars for family members to pay respects and acknowledge their lineage. Linking the world of the living with the dead, these spaces of ancestor worship commonly house death memorials.

The temple typology has not been restricted for sacred purposes. This form has proven its versatility due to its prevalence in Chinese architecture. It has been slowly altered, or slightly deformed over the past millenia to encompass imperial palaces and various administrative buildings.<sup>5</sup> As a space that has previously held Eastern funerary services, this typological form makes it the ideal template for this design.

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<sup>5</sup> Liang Ssu-Ch'Eng, *Chinese Architecture: A Pictorial History*, 50.

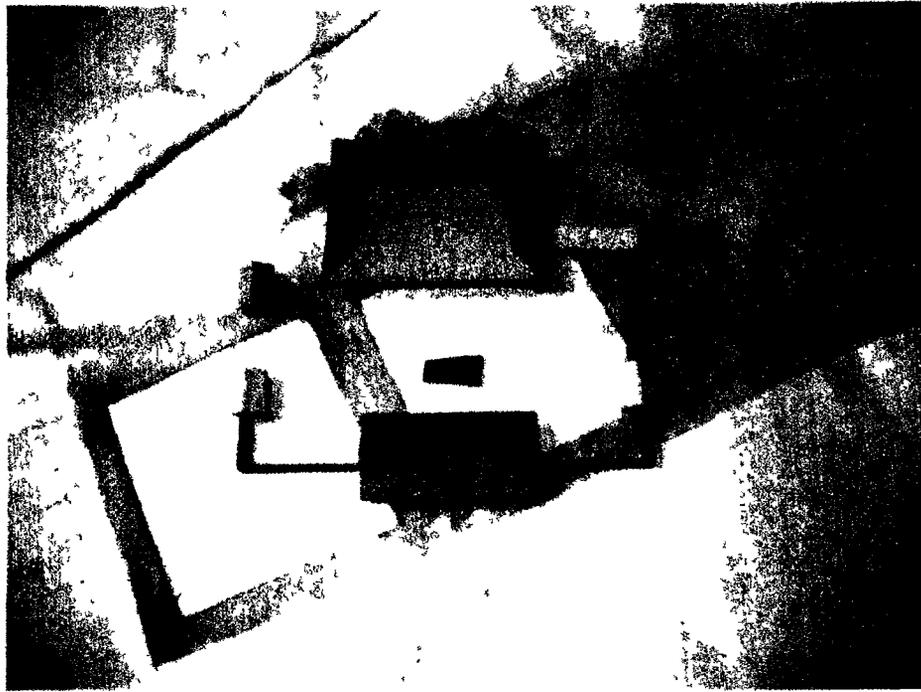


**Fig. 6** Thesis Site is marked out in white. Scale 1:1000  
Neighbouring buildings are marked in red and vehicular roads are marked out in green.  
Fabric dye, pen and embroidery on linen.

### **The Form (*Process*)**

The form of a typical Chinese temple plan is aligned on a strict North-South axis and contains a front entry hall, main hall, ear halls flanking the main hall, and tertiary halls facing east and west. According to Chinese belief, the South represents light and brings good luck and North represents darkness and brings bad luck, therefore the front entrance and main hall should best face the South. These buildings are connected via a wall which

encloses the courtyard space within. The image shown in *Fig. 7* displays how the Chinese Temple, which requires a strict North-South axis, does not coincide with the angular orientation of the site. If we were to fit the typological template onto the site following these necessary parameters, the building will spill out onto the existing road and trees. Scale change will be undesired as the halls and courtyard will shrink in area.



**Fig. 7** Site Model displaying the Ideal Chinese temple and the actual site

Thus, the design requires deformation. First, the form is overlaid on a Cartesian grid. The subsequent phase transforms this Cartesian grid into a corresponding grid that adheres to a) the site, and b) the obligatory North-South axis. Thus, in this case, the site is the formal dictator of the plan by guiding its necessary deformations: The dimensions of the Cartesian plane are altered and extend along the perimeter of the site, extending it along one or another axis, and so converting each little square into the related and proportionate oblong.<sup>6</sup> Since the temple form is already of an appropriate height for the site, height adjustments in the matter of deformation are not required.

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<sup>6</sup> Darcy Thompson, *On Growth and Form*, 276.

**Fig. 8** Typical typological form of Chinese Temple laid out on Cartesian grid.

The grid is deformed to fit the site.



**Fig. 9** The corresponding deformation is defined by the constraints of the site and allows for a N-S Entrance axis.  
Model: Bass Wood, Stretched Nylon stocking, Linen, Card and Sandpaper on Linen Site Plan

## CHINESE FUNERAL CUSTOMS

The design of this building is one that holds traditional Chinese death services. Chinese death beliefs and practices are rooted in their religion which amalgamates Buddhism, Confucianism and Taoism. Believing in multiple faiths may be confusing to some, but the practice is set out with a hierarchy of faiths with ancestor worship embedded in the all-inclusive framework. Ancestor worship is based on the supposition that the spirit world affect that of the living, the living owe everything to their departed ancestors, and that ancestors are only concerned with their descendants.<sup>7</sup> The practice of ancestor worship continues to this day and is still prevalent among Chinese-Canadian immigrants who are conscientious of holding onto their traditions.

It is my aim to design a building to allow for the available traditional rituals to occur:

### **The Funeral Rituals:**

The Family announces the death to the public through '*wailing banners*' of white paper and white textile streamers. There are lanterns of white and blue or yellow and blue. These are all located at the front door. This tradition is held in the main South facing entrance called the Front Hall.

Spirit money, goods, or paper goods including paper house, car and furniture, are burned outdoors on the slab in the center of the courtyard. Outdoor cremation is possible.

The body is then dressed in a burial shroud.<sup>8</sup> The bathing of the body is to occur in the private ear hall where only designated persons are present. After this ritual, the body is placed in its coffin and will be taken to the main hall where the viewing is held. Embalming is available at many Ottawa locations if a family wishes to view the body as transportation of the deceased is highly common.

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<sup>7</sup> Habentein, *Funeral Customs the World Over*, (Milwaukee: Radtke Bros. And Kortsch Co., 1960)

<sup>8</sup> In old Chinese tradition, the ritual bathing of the corpse is essential to the ceremony. Water is secured from a water source and incense is burned before an idol nearby, thus the water is 'bought' from the deity and then heated and used to bathe the body. Habentein, *Funeral Customs the World Over*, 8.

While the body is dressed and laid out for viewing, food offerings are laid by the coffin.

Food is served in the main hall.

The ancestral tablet is prepared and installed at the domestic altar which is located by the main hall. Incense is lit. It is believed that incense purifies the surroundings, bringing forth an assembly of gods and spirits.

Money is presented to ritual specialists such as the Buddhist monks, who chant and expel the corpse safely to their new journey. The monks are located on the stage inside the Main hall.

Acoustical live music of traditional Chinese instruments is performed to accompany the movement of the corpse and to settle the spirits.

The Coffin is sealed.

The procession leads to Burial or Cremation.

**The following material palette will combine to create 10 factures of comfort.**

**The Materials:**

**Hard Materials**

Brick  
Stone  
Copper  
Glass  
Concrete  
Steel  
Glulam (Glulaminated Wood)

**Soft Materials (Decays)**

Silk  
Cotton Velour  
Rice Hull Paper  
Leather  
Feather

## The 10 Factures

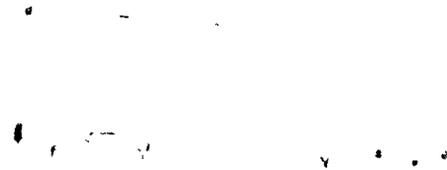
<u>The 10 Factures (Main Hall)</u>	<u>Materials</u>			
Entry Doorway	Copper	Cotton Velour		
Exterior Space of Double Skin	Glass	Rice Hull		
Interior Space of Double Skin	Steel	Silk		
Double Skin Wall (Within)	Glass Concrete	Steel Leather	Silk	Rice Hull Paper Feather
Double Skin Roof				
Outer Skin	Glass Shingles	Glulam		
Inner Skin	Steel	Silk		
Corner	Copper	Steel	Concrete	
Glass Feature	Glass	Gluelam	Cotton Velour	
Flooring	Stone	Glulam		
Cruciform Column and Beam	Glulam	Steel	Cotton Velour	
Brick Puncture	Brick Concrete	Steel Glass		

### ENTRY DOORWAY

The entrance to the main hall comprises of one solid exterior door and one fabric interior door. The exterior door is comprised of solid copper that oxidizes into a rustic green with age. As one touches the doorway, the surface is polished with the fingertips, thus displaying the traces of touch over a period of time.

The entrance door is attached to hinges that allow the doors to open 180 degrees.

Behind the entrance door are two pieces of fabric hung from a steel rod.



**Fig. 10** Entrance to Mail Hall

### **Double Skin:**

In the main hall, the walls are of double skin.

#### EXTERIOR SPACE OF DOUBLE SKIN

The exterior wall is composed of double-paned glass that sandwiches a thin layer of *rice hull paper* providing a non-uniform translucent appearance. The rice hull paper is comprised of rice hulls pressed with milled mulberry paper into a flat surface. As an inexpensive byproduct of agriculture, rice hulls are known for their water resisting and insulating properties, and are popularly used in bedding and even building construction.

The bottom 8 rows (2 meters) of glass paneling are textured on both sides. This part of the cladding is within reach of the user. As these are spaces where the mourners are invited to touch, the glass is textured with bumps, dents and small punctures. This encourages the user to polish the glass with their fingertips, and access the rice hull through the various punctures.



Fig. 12 Rice Hulls

Fig. 11 An example of Translucent Rice Hull Paper

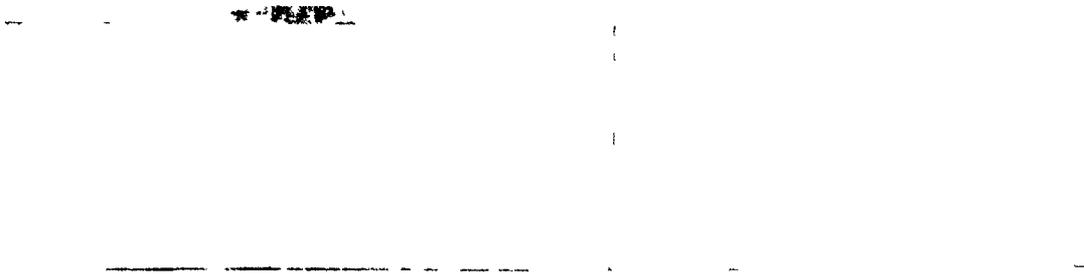


Fig. 13 Partial Elevation of Main Hall with exposed section, displaying the use of rice wall cladding

## INTERIOR SPACE OF DOUBLE SKIN

The interior wall system is comprised of fabric - double ply fireproofed ivory silk (silk fabric lines the inside of the roof as well) and steel. The silk wall is knotted<sup>9</sup> onto a steel column which gives the building a uniform 'glow' of light without the presence of harsh shadows.

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<sup>9</sup> The interior walls are essentially held in place by a series of knots.

The earliest structural artifact was the knot. Semper regarded it as the oldest technical symbol and the earliest expression of cosmological idea.<sup>9</sup> Kenneth Frampton, *Studies in Tectonic Culture*, 86

This is similar to being under the blanket covers in the morning of a sunny day, where the light diffuses through providing ample warmth and even glow. This space underneath the blanket covers provides comforting solace. During times of grief it is common for mourners to 'stay in bed' and weep underneath the sheets.

The translucency of silk is important because it allows for individuals within the double skin wall to be visible.

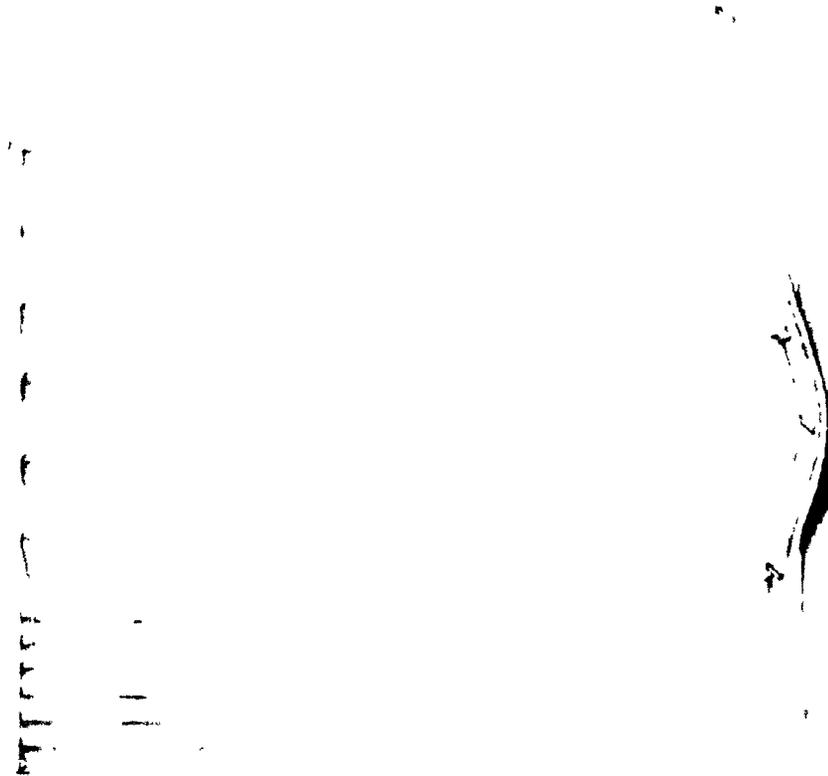
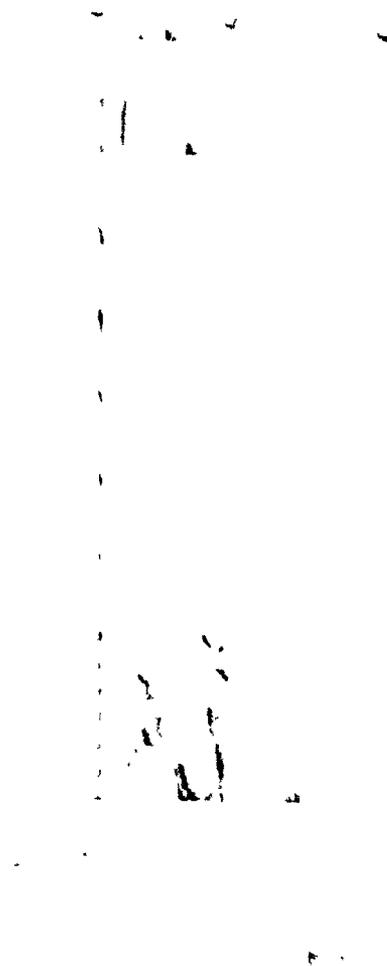


Fig. 14 and Fig. 15 Interior wall of double skin – Silk fabric is knotted onto steel column detail.

## WITHIN THE DOUBLE SKIN WALL

The double wall system is closed off and accessed via a guillotine door. Ventilation of the space is generated by opening the top row and bottom row of awning windows. This provides a cooling mechanism for the building and ultimately causes movement of the inner fabric wall which flutters against the breeze.

The narrow spaces between the walls are of soft lighting without the harshness of shadow providing a space for individuals to reflect. Located between the concrete columns are spaces to sit. These seats comprise of a concrete mound surfaced with a layer of leather stuffed in feathers. The user can choose to open the window by cranking a leather bound handle. This allows for a gust of wind, potentially alleviating the feelings of stifling discomfort.

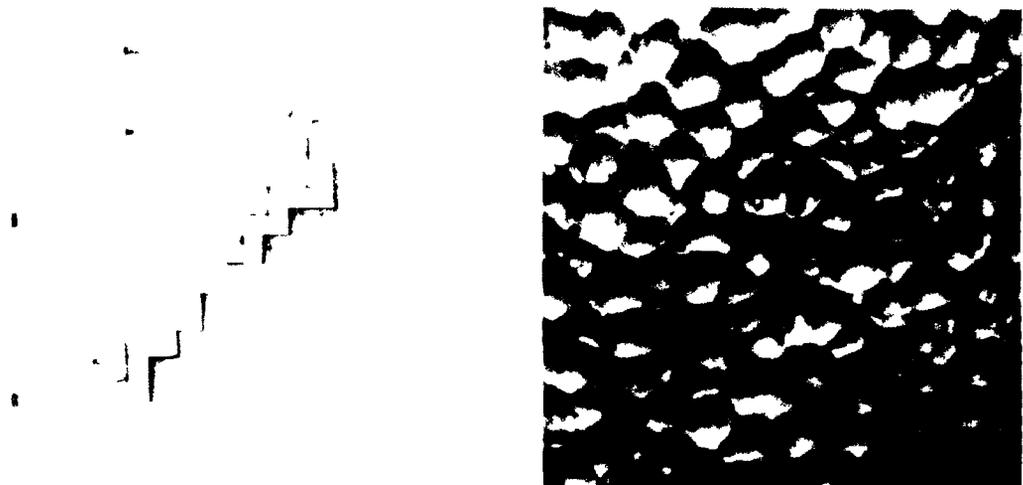


**Fig. 16** Inside the Double Skin Wall – Space wind, heat and diffused light.

## CORNER

The corner detail of the design borrows from that of the Chinese temple where the corner column is left partially exposed. For this thesis, the exterior and interior cladding of the corner detail is composed of hammered copper sheets. These are held in place by gluelam wood structure. The bumps created with the hammer provide the copper with added texture for the eyes and the fingertips.

Within the interior space, an individual is placed between a wall of wavy silk and textured copper walls which zigzag by ninety degrees. In a couple of locations, leather bound feather cushions are attached to wooden seats extruding from the wood structure. This allows for users to pause and reflect within the corners of the walls.



**Fig. 17** and **Fig 18**. The Corners (interior and exterior) are clad with hammered copper.  
Fig. 17 displays the corner seating spots.

## DOUBLE SKIN ROOF

The roof is a double skin glass system. The outer skin is comprised of a dressing of glass shingles held in place by a structural gridding of glass beams. These in turn are held perpendicularly by glulam beams. Shingles are generally linked with structural armour in its rigidity, protection and flexibility. This displays the parallels between roofing and military dress.

The inner wall is a surface of silk fabric which is knotted onto steel connectors attached to the glulam beams. The silk lined roof in addition to the silk lined walls gives the user the feeling of being embraced by the silk.



**Fig. 19** Glass Shingles rests on glass beams (sectional cut), which in turn rests on glulam beams.

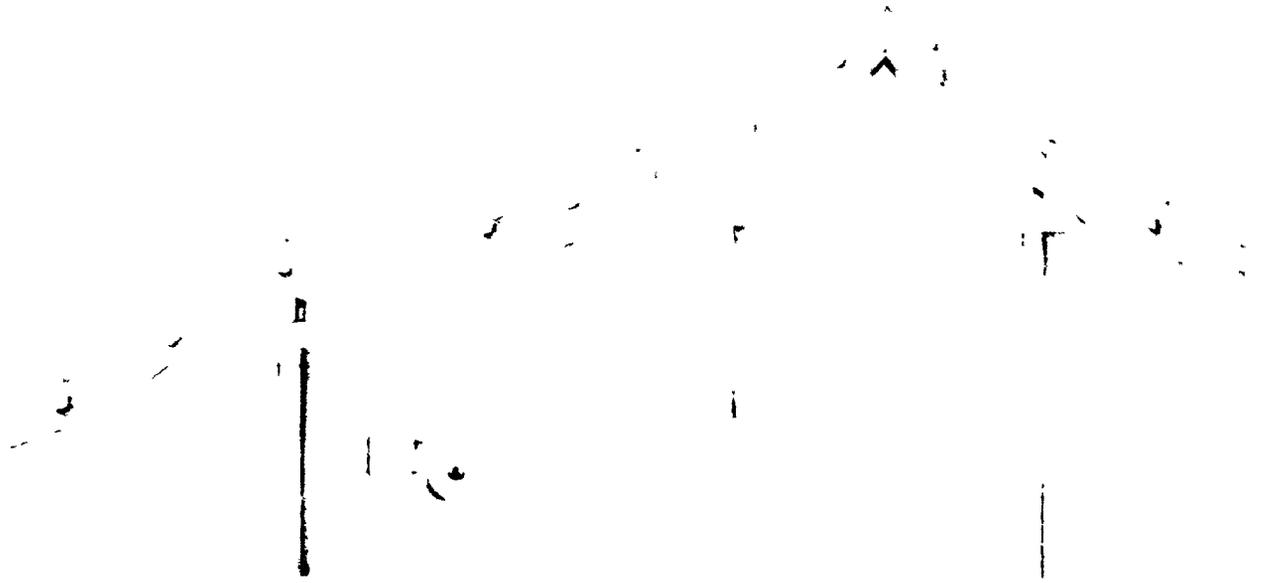


Fig. 20 The underside of the roof is dressed in white silk.

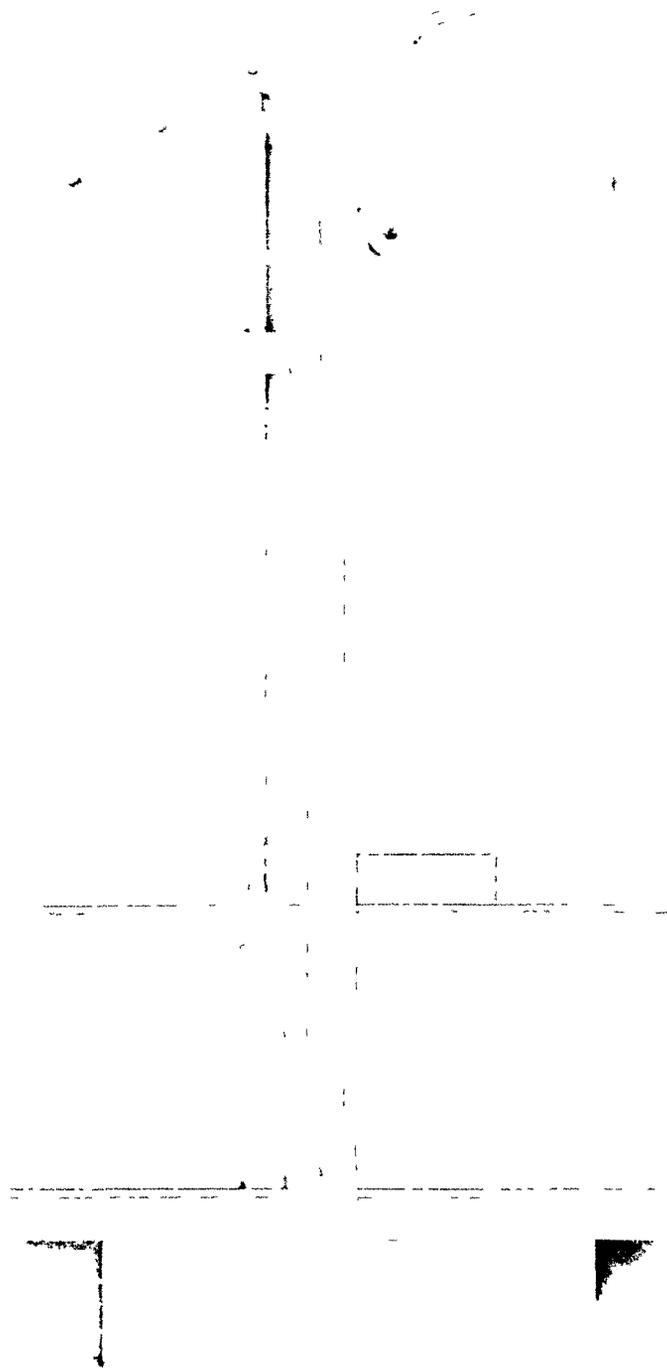


Fig. 21 Glass Shingle Roof – Dressing of shingles allow for curvature and acts as a fabric.

## GLASS FEATURE (And Cotton Velour Veil)

One of the primary features of the main hall is the glass feature. The roofing elements penetrate into the interior. Thus, a part of the roof deforms linearly into an interior wall. The occupants are able to view rainfall and snowfall through this element - which does not contain the translucent fabric film and is therefore see-through. This feature is the largest surface of approximately 17m wide that allows for echo and is the façade behind where the chanting monks and musical performances are situated. Curtain is hung in front of this feature and is able to coil into storage by the beam system or roll out. Manipulating this large piece of fabric, in turn, manipulates the resonance of the chanting and musical acoustics. A large cotton velour fabric either unravels to veil the feature thereby quieting the echo of the music, or coils up to reveal the feature and increase the volume of the music.

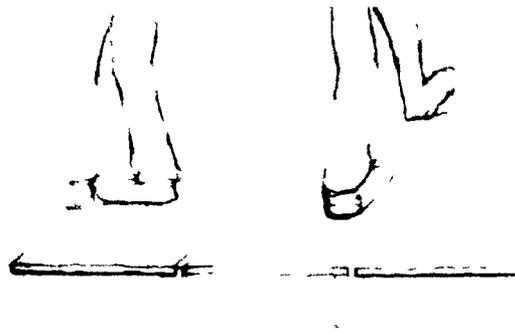
The cotton velour fabric provides a backdrop to the main altar / stage. It is here where incense and candles are burned, attaching onto the fabric, intensifying the scent of the space.



**Fig. 22** The Feature - The glass roof deforms, puncturing into the interior.  
Note the fabric coil where the cotton velour curtain rolls out.

## FLOORING

The structural flooring for the main hall is comprised of curved glue-lam wood beams. These beams are cross-woven to support stone tiles of 50cm 50cm dimensions. The tile system fits onto the cross-woven beams and is patterned in a manner to allow for both resonating and silencing paths. The acoustical patterns do not coincide with the visual pattern of the tiles, adding another layer to the architectural experience, while skewing predictability. The silencing effect is achieved by attaching a layer of cork on the underside of the stone tile. The echo of the stone is audible but not too distracting because the fabric walls do not provide an echo, thus the sound is low to the floor and ground the occupants. The purpose of this is to have the building return some sound while providing for a unique acoustical memory of the space.



**Fig. 23** Stone on Woven Glulam Flooring.  
Cork on the underside of the stone muffles the sound. The corkless stone resonates.

## BRICK PUNCTURE

The neighbouring buildings are constructed of brick. The building east of the main hall contains the washrooms, kitchen and furniture storage. The connecting brick hallway punctures into the main hall creating another corner space within the double walls.



Fig. 24 Corner space within Double Skin – Seat faces inner wall.

## CRUCIFORM COLUMNS AND BEAMS

There are 16 cruciform glulam columns located within the interior of the silk walls. Cruciform columns suggest the division of one space into four (quadrant).

There are two spiraling<sup>10</sup> steel tracks, one that winds clockwise and the other counter-clockwise, that intertwine. The fabric walls are attached to these tracks, thus the wall is convert from a wall to a column coil and vice versa. The spirals wrap around the columns. Thus, the gluelam column is shrouded by fabric. Pragmatically, this is a method in storing the walls. However, in regards to the senses, one is able to move navigate into the spiral, thus becoming physically engulfed within the shroud and the individual shall smell the scent of the fabric. In addition, this creates a narrow tall dark space with a hint of light illuminating at the top of the fabric as one points their eyes upwards.

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<sup>10</sup> Textiles are synonymous with twisting and spiraling. Parallels are seen between fabric and paper, as they are both stored as spiraled rolls. The coil is the main storage structure of textiles and is exploited through a spiraling motion. Visually, spirals imply movement. It is a singular continuous line coiled with one beginning and one end. Components of two dimension, such as a wall, can curve and be stored as a three dimensional element. (Mary Schoeser, *World Textiles: A Concise History*, 18.)



Fig. 25 Double Spiral Tracks, an early spiral sketch and a column joint.

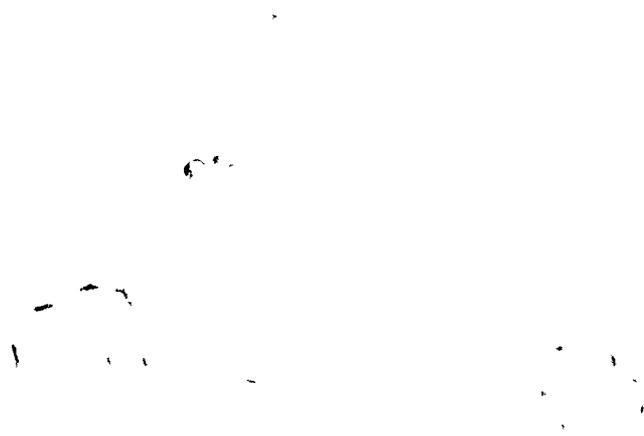


Fig. 26 Solitary Comfort  
(By Glass Feature)

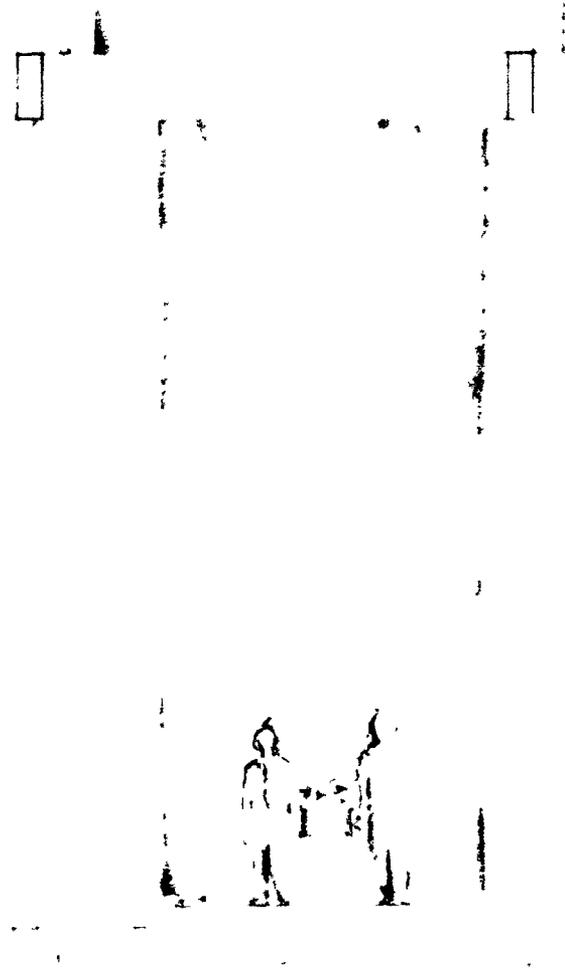
Fig. 27 Solitary Comfort (Plan)



Fig. 28 Social Space



**Fig. 29** The cotton velour fabric in this arrangement reveals a portion of the casket upon entering the main hall.



**Fig. 30** Funeral scene from 1:50 Section.

## The Courtyard

### THE BRICK WALL

The main outdoor courtyard is bound by a wall of brick dressing – sound is contained within the space and creates resonance of mourners weeping and relatives chatting. The courtyard provides for a social space where individuals can seek comfort in fresh air.

## STONE SLAB (COURTYARD)

In the middle of the courtyard lies a flat rectangular stone slab to support the pyre. As a hearth, the funeral pyre provides social interaction, comfort and a sense of ritual. It is here where the mourners are able to sacrifice goods or paper purchases for the deceased in the afterlife. This ritual provides the mourner a sense of comfort as they feel as though they are still able to give to their dearly departed. The smells of burning paper fill up the nostrils while smoke shimmers upwards, and the fire warms up the skin, providing coziness.

### Design Explorations

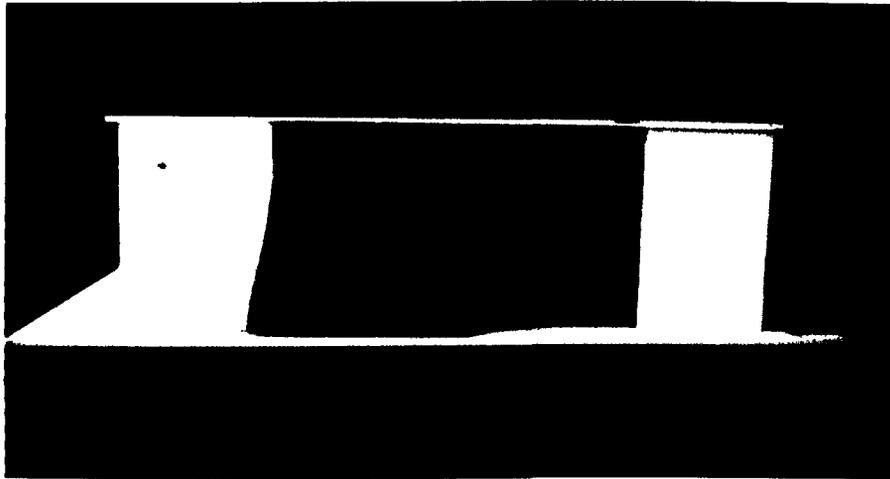
The design exploration began with sketching a series of perspectives and elevations that express potential uses of textiles within a funerary space. The sketches portray how fabric can transform a space in relation to the human figures. *See Fig 31.* These sketches display key concepts: the folding of the curtain to reveal an entrance, the movement of fallen cloth as it drapes over the coffin (like a shroud), and the interaction of wind and fabric.



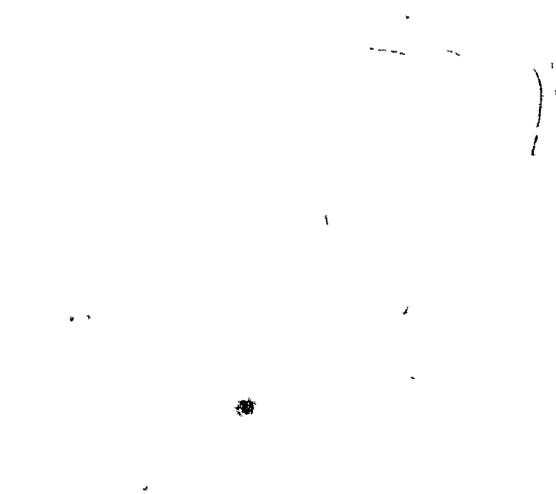
Fig. 31 Conceptual Sketches – Pencil Crayon and Ink on Linen

## Exploring with Tactility

The initial spatial investigations focused on tactility to explore and communicate space in a manner that is not visual. Materials are selected in accordance to how they feel as opposed to how they appear. The fingertips are required to reveal the spaces and texture within. Thus, the spatial experience of this model requires a level of interaction and intimacy in order to be realized. *See Fig. 32 and Fig. 33.*



**Fig. 32** Tactile Model



**Fig. 33** A Visual interpretation of the space.  
The drawing was completed with the right hand as the left hand explored the spaces.  
Image drawn by fellow thesis student.

## The Silence and the Echo (Site)

One of the challenges of this project lies with the fact that the 417 highway is located directly behind the site. Thus, the distracting noise of the machine is ever-present in this space of ritual. The proposal includes addressing this problem by installing two layers of synthetic textile PVC material to create a wall against the highway. Ultimately, the use of textiles will muffle the sounds of automobiles, which is one of the more sound-polluting inventions of this technological world.

As a type of fabric, this installation will undulate under the wind and serve as a landmark for those driving across the highway. This installation is influenced by the works of the artists Christo and Jeanne-Claude whose large scale use of fabric serves as a graceful landmark against natural settings.<sup>11</sup> See *Fig 34*.



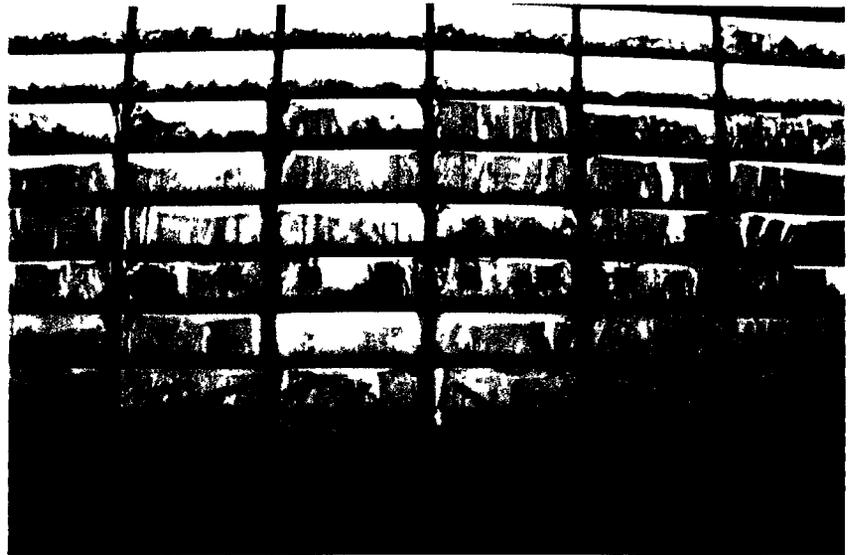
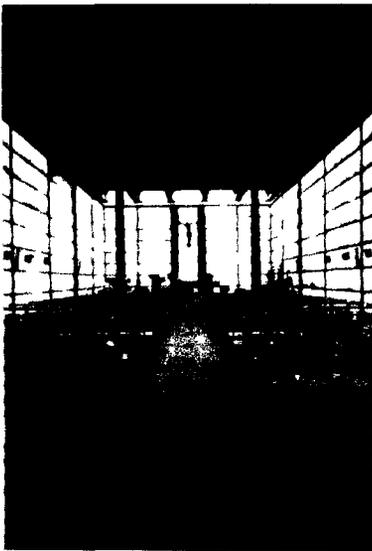
**Fig 34.** Christo and Jean-Claude Installation.

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<sup>11</sup> Molly Donovan, *Christo and Jeanne-Claude in The Vogel Collection*, 30.

## Double Skin Precedent

Located nearby Milan Italy, lies the quiet church of Chiesa Mater Misericordiae by Angelo Mangiarotti. The church places Styrofoam in between the glass paneling. Built in 1958, this modernist building utilizes modern materials, however, the use of Styrofoam and its disintegration under sunlight that allows for the body to transform with age. It is the aging of the building, the random fracturing of the Styrofoam, that most determines the uniqueness of this building. Mangiarotti's use of Styrofoam is similar to this thesis' use of rice hulls within the glass. Both materials age under contact with direct sunlight; however, the encasement within glass offers both protection against the elements. *See Fig. 35 and Fig. 36.*



**Fig. 35 and Fig. 36** Church of Chiesa Mater Misericordiae

The Styrofoam is trapped between double glazed glass.

## **The Sterile and the Living**

The use of rice hull and fabric in the building system is to introduce and juxtapose natural material against those of manufactured technology. As mentioned in the second chapter, sterility is synonymous with elements and environments that are devoid of odour and life. The use of rice hulls addresses this issue, as it is an untreated component of the living. The design intends for this material to age, fade under light, and slowly alter over the course of its life. Fabric of fireproofed silk and cotton flannel partially cloak the contemporary materials of glass, concrete and steel, and in this dressing, breathes life into the space.



Fig. 37 Double Wall Detail



**Fig. 38** 1:50 Scale Plan of the Main Hall

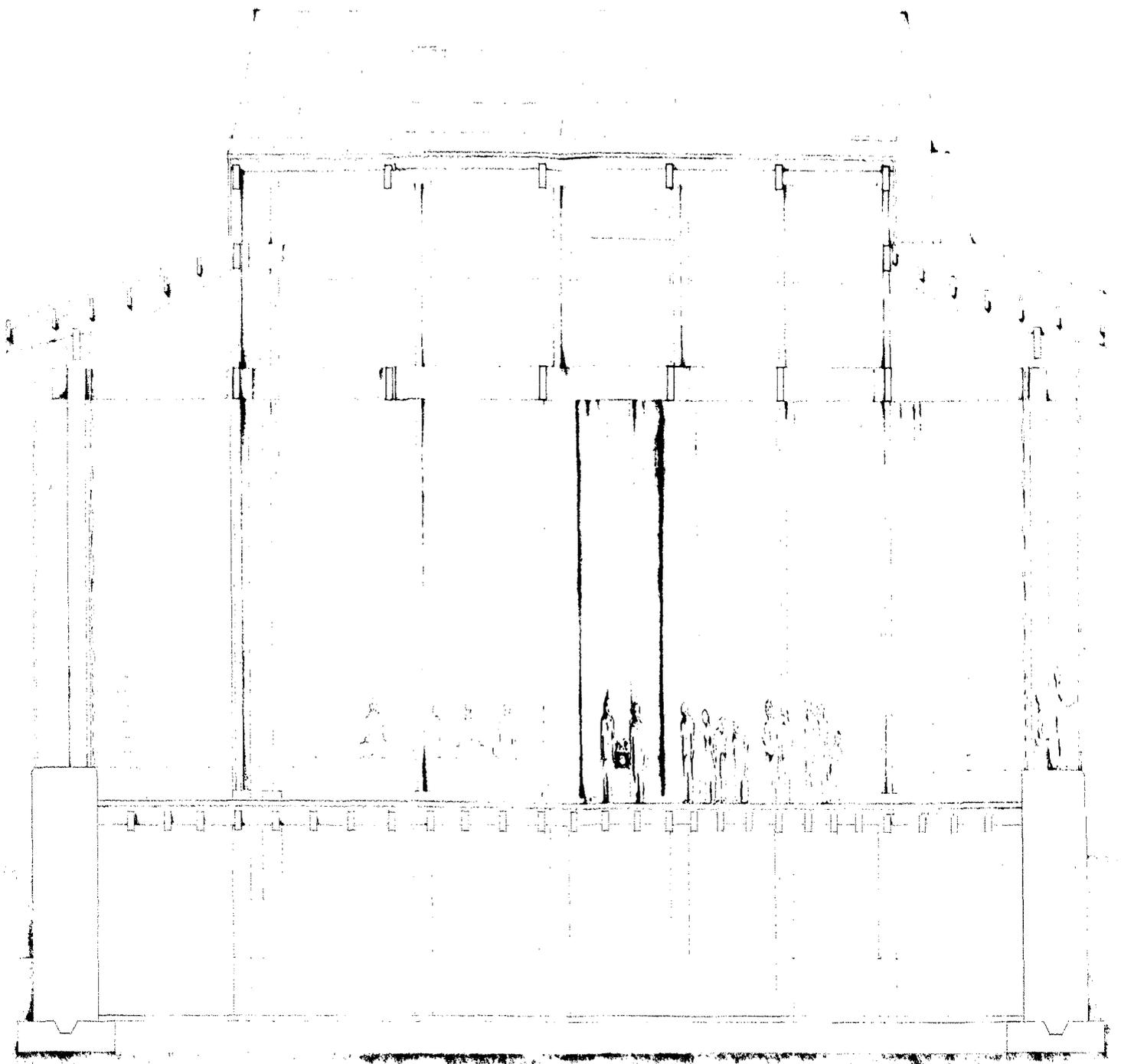


Fig. 39 Longitudinal Section Funeral Scene

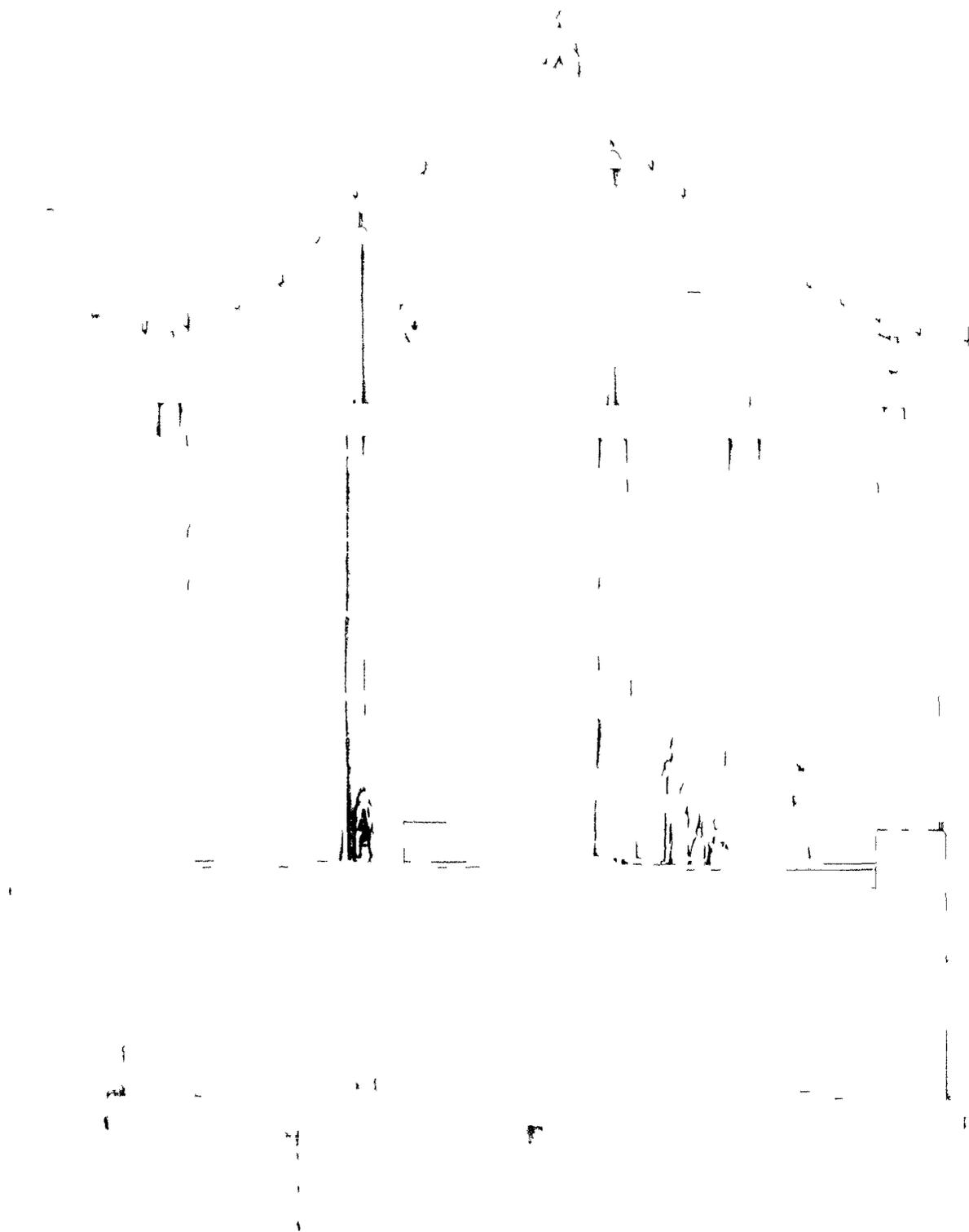


Fig 40 Transverse Section Funeral Scene

## Conclusion

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The concept of death lies at the innermost core of one's life experience. It is these emotions towards death and the way we ritualize them through uses of textiles and ceremony that are connected with the way in which we dress and build. Essentially these emotions are rooted in our own existential view of our short lives on this earth. It is important to reiterate the obvious dualities of life and death, as one does not exist without the other. Thus a ceremony of death is essentially a celebration of life. Only with the confrontation of mortality can the celebrations of life, in its fleeting nature, be fully appreciated.

The prevalence of textiles within celebratory events highlights its importance. As a medium of great tactility, textiles have proven to provide therapy, delight, and ultimately comfort. The thesis has discussed how it is the lack of sensations that attribute to the desensitized nature of our living environments. The barren spaces of modernity that are lacking in stimulation are countered through textiles. Textiles are identified with odour, with decay, and essentially with life itself. It is the abilities of textiles to emote, to physically stimulate, to provide comfort and coziness, all beyond a level capable of other architectural material, that necessitate the presence of textiles in architecture. Architecture has originated from textiles, and only with the return to its textile origins can built environments in the future truly evoke the sensations of human emotions, and in doing so, address the human nature of the living and dying.

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