Synaesthesia: Corporeal Encounters

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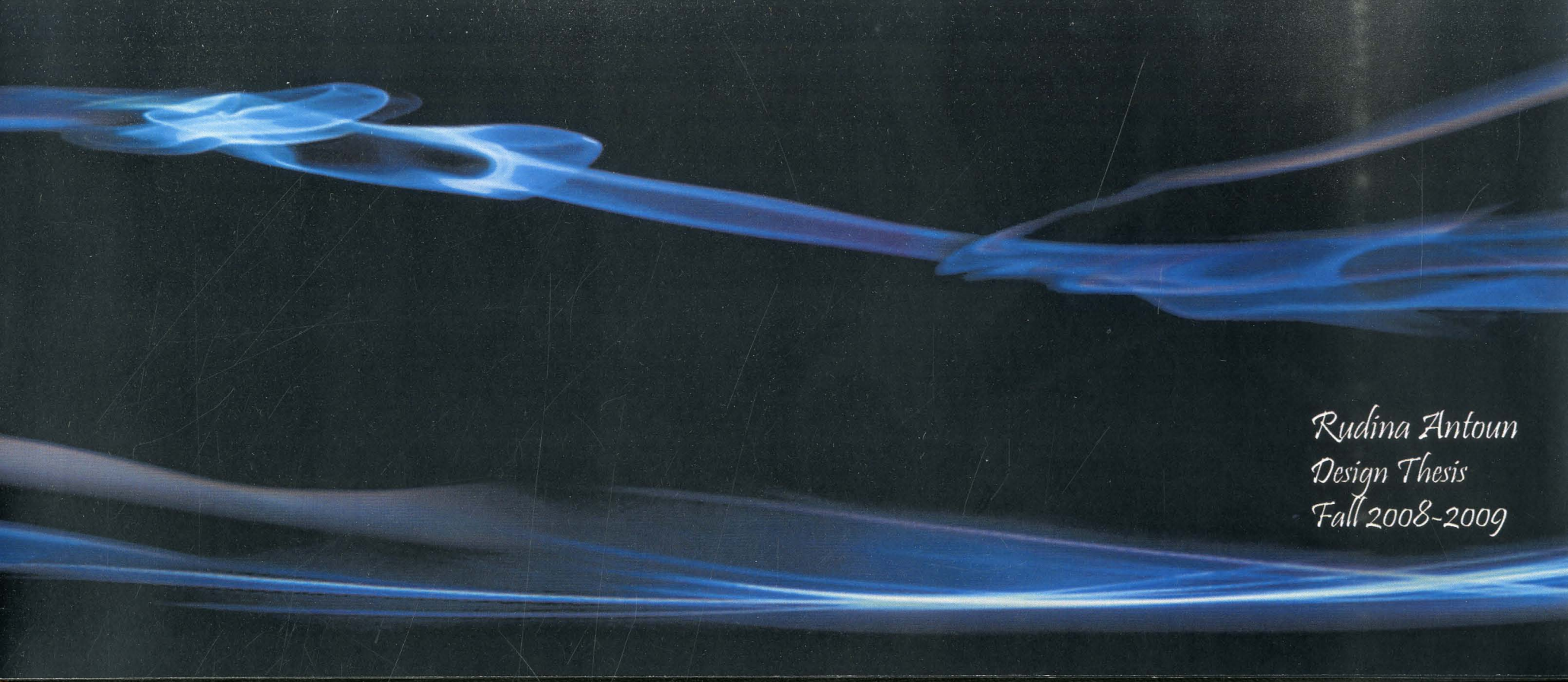
Rudina Antoun
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Several people have been stimulators throughout the whole process.

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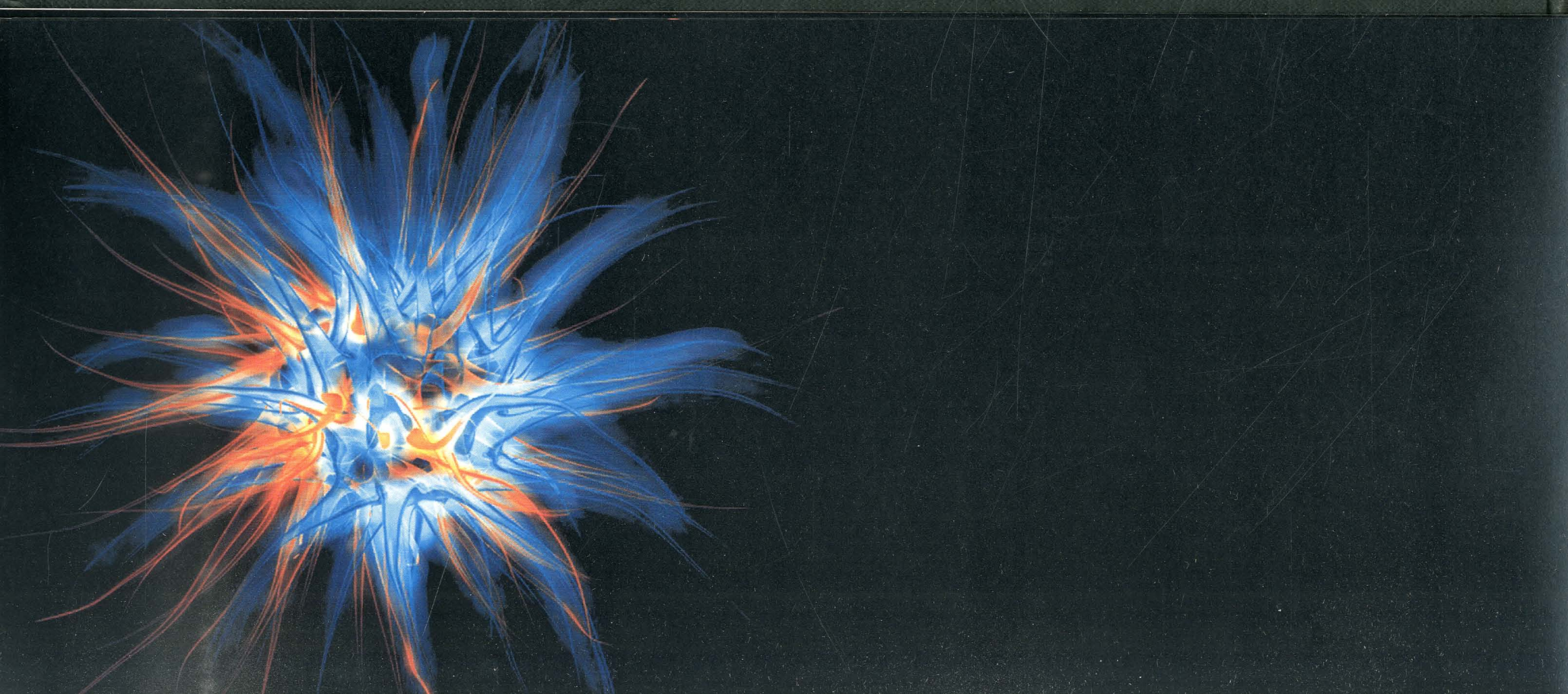
Abstract

Most people nowadays live a fast paced life. They are not willing to go through anything that doesn't produce financial profit. They are becoming working machines; their lives are driven by speed and instantaneity. Fastness detaches and alienates us from our environments and even worse from our bodies. We no longer appreciate or even know the capabilities of our human body which affects adversely our personal growth and development. The objective of the thesis is to re-awake the corporeal nature of our bodies, to call us to a quietness of mind, transcending our fast pace and creating awareness that leads our bodies and mind towards self-actualization. Being an ongoing process of integrated personal growth, self-actualization calls for the entire engagement of the senses. Hence, sensory intensification will be adopted as the methodology to explore the levels of attention required by each sense to create a multi-sensorial experience. Our perceptions are not the sum of visual, tactile, audible, olfactory, and kinaesthetic stimulations because we perceive in a total manner that speaks to all our senses at once giving sustainable meaning to synaesthesia.



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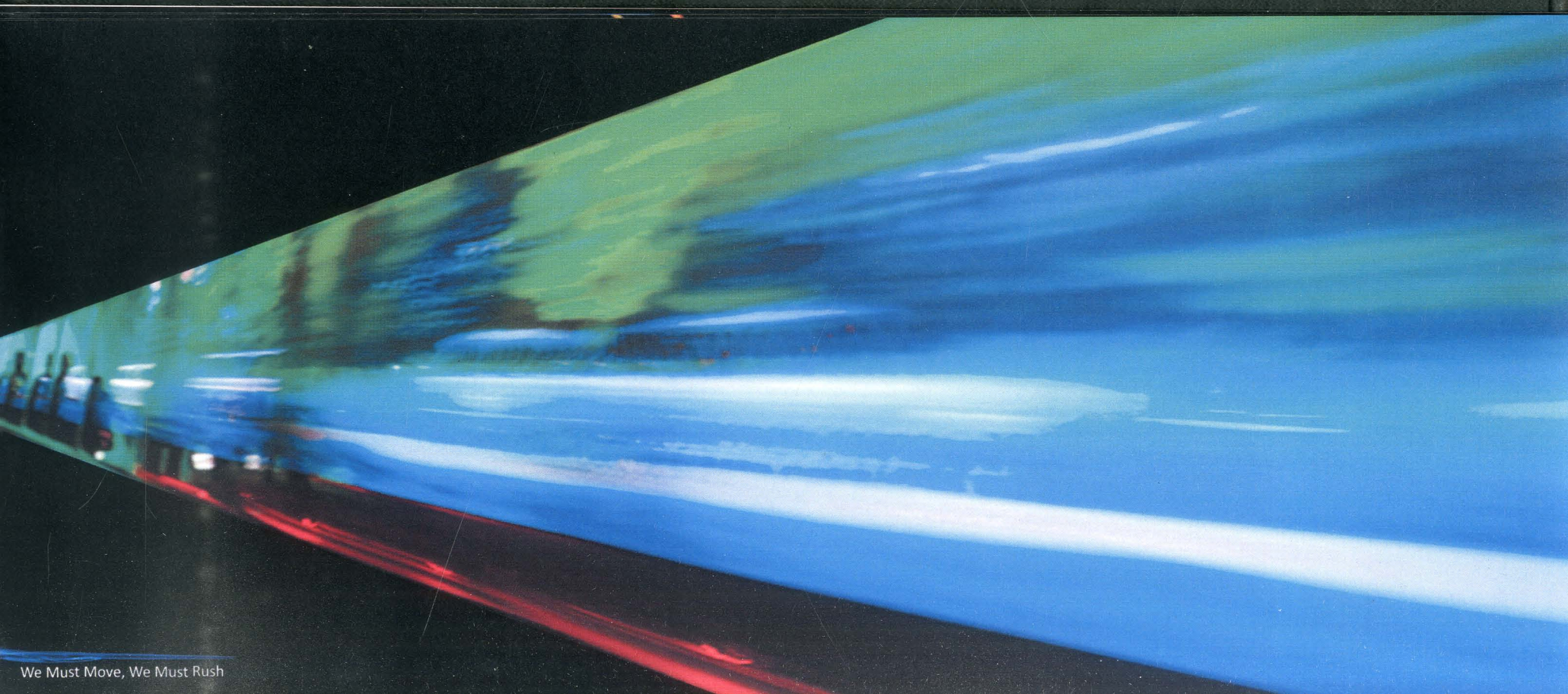


We Must Move, We Must Rush

Introduction

We have lost a sense of wonder. We are afraid of the many things we imagined and created in our minds as children. No longer can we stare at the crack of a sidewalk or the pattern of a cloud or the shadows of a tree. We have to work, we must move, we must rush. Our watch ticks the hours and measures every moment, and as we march toward some accounting of our everyday life, we forget to wonder and listen and simplify and dissolve ourselves into all the things around us. We have lost contact in our urban culture with nature and natural cycles, seasons, orbits and rhythms.

You and I, our bodies are calendars in themselves, breathing, digesting, pulsating. When you walk, breathe to your steps and activate each of your senses, soon you will feel around you a new world, one that is cunning yet simple. You must forget the obvious, the ready-made, and search for new horizons. This is what I think we must do if we are not to become machines. Already I see buttons sprouting on top of some people and aerials sticking out their backs. Some people talk as if they are computers and others act like vending machines spitting out their work for their paycheck. Maybe soon our organs shall become mechanical. Many seem more attached to their cars than to their families, spending their lives between destinations and never arriving. We rush and rush but where to, no one knows! We believe we are trying to catch up with the train of life; when all we are doing is simply missing the pleasure of the ride. Sometimes, I wish we were weeds planted in a field and forced to look around and listen and involve all our senses.

We are a species that evolves to survive, but could it be that we're evolving in the wrong direction? The further we evolve; our survival seems to be more jeopardized. Is it the evolution itself or simply the way we're handling it. Fastness has mutated us. We have become aliens to our own bodies: no longer knowing their capabilities or even exploiting their potential. Consequently, we are detaching more and more from our environment and the consequences are manifested in different forms. One of them being the spaces we nowadays inhabit.

The world is fast. Acceleration, in temporal terms (speed) and in material terms (growth) is the orthodoxy of our age and progress has become synonymous with speed. Indeed speed itself has evolved from noun to adjective and, because speed (i.e. fastness) always implies progress, slow seems to imply stagnation and inertia. We live in accelerating times and architecture no longer stands still. Slowness is a progressive revolution, a philosophy that optimizes both the advantages of technology and the pleasure of reflection. It finds new resources, new energy, and efficiency, unexpectedly, in slowing down.

Slowing our pace re-awakens our sense of wonder and heightens our sense of the eternal.

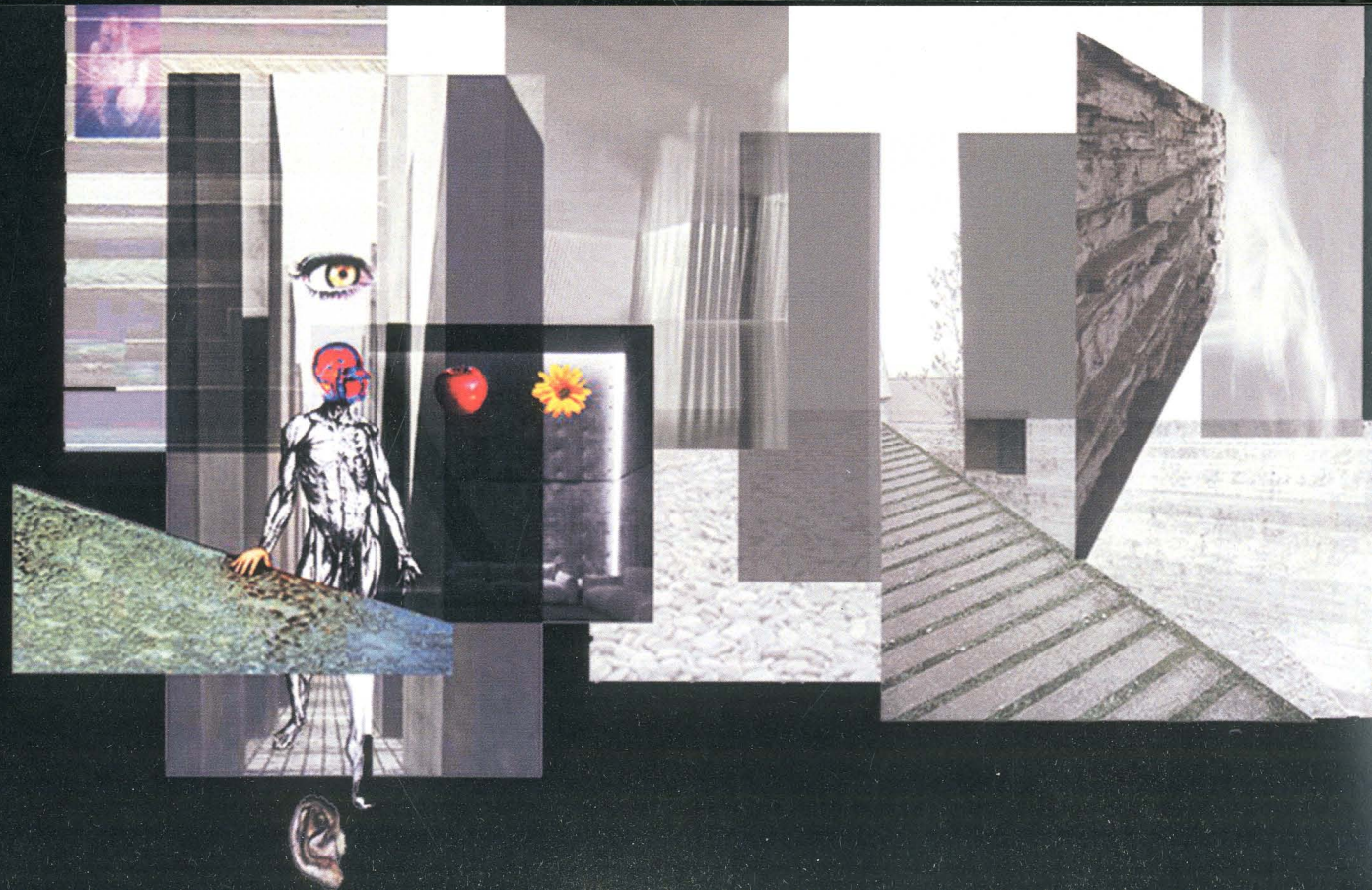
The reward for slowness is sometimes inspiration, a seemingly instant and timeless (fast one might think) insight that 'solves' the 'problem'. In fact real inspiration is the outcome of reflection and investment over time in curiosity, open-mindedness, personal growth and refinement. And even after an answer presents itself, design still requires reflection and improvement, in an iterative cycle of decision and reflection. And slowness is not only applied to design but to each moment of our daily life.

There is also slowness of making- the slowness of doing. Most of the buildings that we may consider slow, the Victorian pubs of Dublin or Corbusier's La Tourette are so because they continue to weather but show few signs of wear, they age as if crafted to do so. Their form may evoke a timeless emotion in us, it's true, but the slowness is enshrined because their form, material and detail are crafted not just constructed, made to weather not proofed against it. Slow things are made slowly, crafted. One thinks of the first grandfather clock which took two years to make, or cathedrals such as Chartres which took 100, not to mention Gaudi's, still under construction, Sagrada Familia in Barcelona , perhaps the very epitome of slowness and stillness.

Hustly of City (Image on right)

Some of the emphasis on this comes down to the dependence for slowness on materiality. Materiality is the architectural aspect that does 'enslow'. It is more bound into time and memory than space and form. Surface can stimulate the ear as well as the sense of touch, while materiality may tickle our sense of smell and trigger the anticipation or memory of the past and the anticipation, or dread, of sounds in the future. Form, made of substance, suggests shadow, the permanence of solidity and drama. It allows age to be registered in crack and scratch, in stain and streak. The erosion and deposition that marks seasons and weather are registered as much by hand and nose as by the eye.

It would be the creation, appreciation, and enjoyment of all that is careful, that is textured and that stimulates the senses - and the sense of time, in buildings. Slowing, living, and being aware of the present moment would 'enslow' our senses, our thoughts, our movements and actions. It would add to the delight of our day by deepening a sense of being here; being present and being grounded-through the way the building has been created, is used, and continues to age.

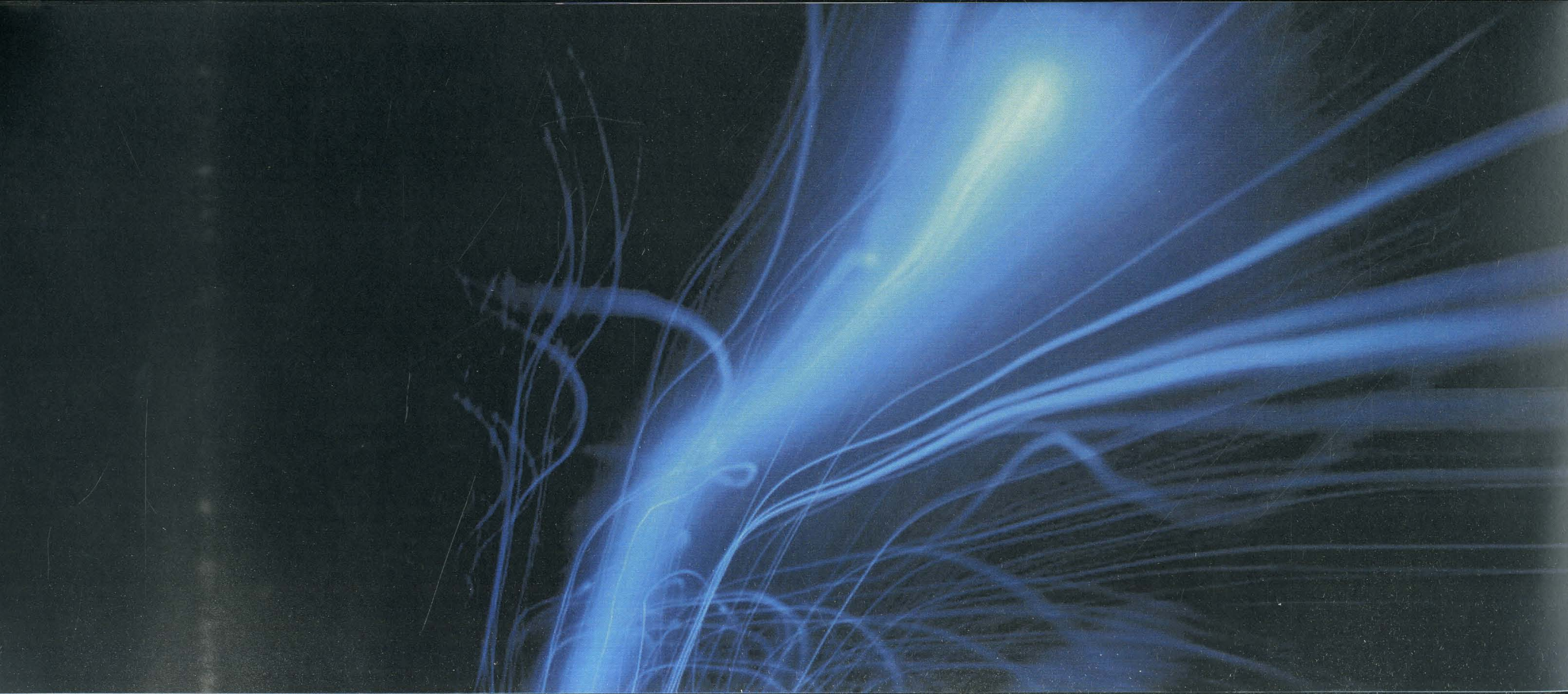


Introduction

Throughout the academic years in an architectural school, we are taught how to design in plan, section, and model forms. We are concerned with technical aspects: structural, technical, mechanical, and electrical. We are urged to abide by building laws and architectural standards. Yet we were never concerned with the human being, the sole purpose behind the design process. Probably, it is as such because we take it for granted that we have forgotten all about it. Or maybe, there is so much to learn and 'time' is limited as we have come to believe.

I am not denying the importance and necessity of all the tools and aspects mentioned above during a design process; I am only saying that they need to be investigated in relation to the human body and maybe contribute to its evolution.

I'd like to share with you new sounds, new feelings, new insights, I'd like to activate your nerve endings, your earlobes, you hair follicles, toe nails, and imagination. I'd like your senses to become immersed. I want to talk to you, not to your mind so much as to your stomach, your body, and your feelings. Our potential must reach downwards, inwards, aroundwards, and touch, like the Japanese sculptor who exhibited his works in a large American museum. As he arranged each statue, the curator was surprised by the title sign that the artist placed at the base of each work saying: ''Please Touch!''



Thesis Objectives

The intent of this research is to explore how the realism and tactility of architecture are understood not merely through the visual syntax but rather through situations and encounters of bodily experience. It is an examination of how spaces immerse their audiences in a sort of 'corporeal encounter' that leads them through a sequence of sensorial engagements in which they are involved not as static spectators but as dynamic participants who move through space, interacting with it.

How can an edifice swallow us into a process of personal growth and higher levels of meaning, confidence, contribution and potential? How can it be accomplished spatially, physically, and programmatically? How can such an experience be designed through sensory intensification?

Space as Stage for Action

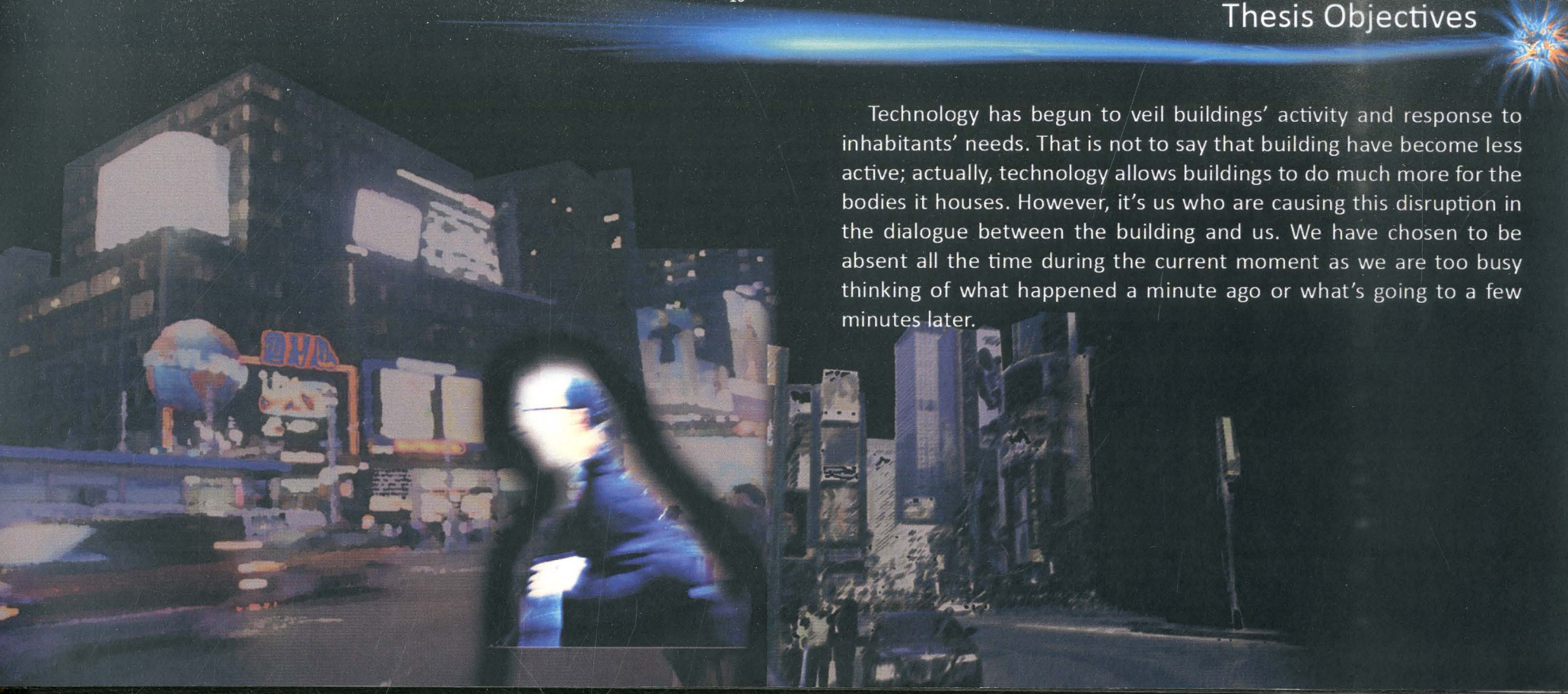
Spaces serve as a stage for our actions. Our movements through space can be informed or at times controlled by the architecture that surrounds us. The body and the building are always in a dialogue. This symbolic relationship is illustrated by Tadao Ando through the Japanese concept of the shintai. Oversimplified in its direct translation as "body," Tadao Ando explains it as "...a union of spirit and flesh. It takes cognizance of the self."[1] He portrays the connection between the shintai and its surrounding as:

> *"The body articulates the world. At the same time, the body is articulated by the world. When "I" perceive the concrete as something cold and hard, "I" recognize the body as something warm and soft. In this way the body in its dynamic relationship with the world becomes the shintai. It is only the shintai in this sense that builds or understands architecture."*[1]

From Tadao Ando's depiction, we can extract three things as being critical in man's comprehension of his self and his world: the body, the building, and the environment. All of these are active participants in the "dynamic relationship" he speaks of. The body's active role is the most apparent as it moves through space and place, interacting with and altering its surroundings. However, the building also changes to suit our bodies whether it is through climate control or opening of a door. The building is in fact active anytime we are in contact with it, even when it appears static, as the support of the floor acts in response to our feet with every step and the walls hold us as we lean against them. The environment is also ever changing, with every shift in season, weather condition, and movement of the sun affecting the building and its inhabitants.

1. Ando, *Shintai and Space*, 1988, p.3

Thesis Objectives



Technology has begun to veil buildings' activity and response to inhabitants' needs. That is not to say that building have become less active; actually, technology allows buildings to do much more for the bodies it houses. However, it's us who are causing this disruption in the dialogue between the building and us. We have chosen to be absent all the time during the current moment as we are too busy thinking of what happened a minute ago or what's going to a few minutes later.

Self-Actualization

Self-actualization is an ongoing process in which one's capacities are fully, creatively, and joyfully utilized. The concept was brought into prominence in Abraham Maslow's hierarchy of needs theory as the final level of psychological development that can be achieved when all basic and meta needs are fulfilled and the "actualization" of the full personal potential takes place. The term is used in many psychological theories. Scientifically, it is defined as " the process of recognizing neurological networks , through learning, by recombining compartmentalized brain functions, designed for other purposes, into new and useful capacities."[1] This would include any complex task that requires a learning process to reorganize brain function around the new task including engineering, plumbing, and carpentry, etc. This creates new neurological pathways which begin the process of interconnecting otherwise compartmentalized neurological networks into new brain functions.

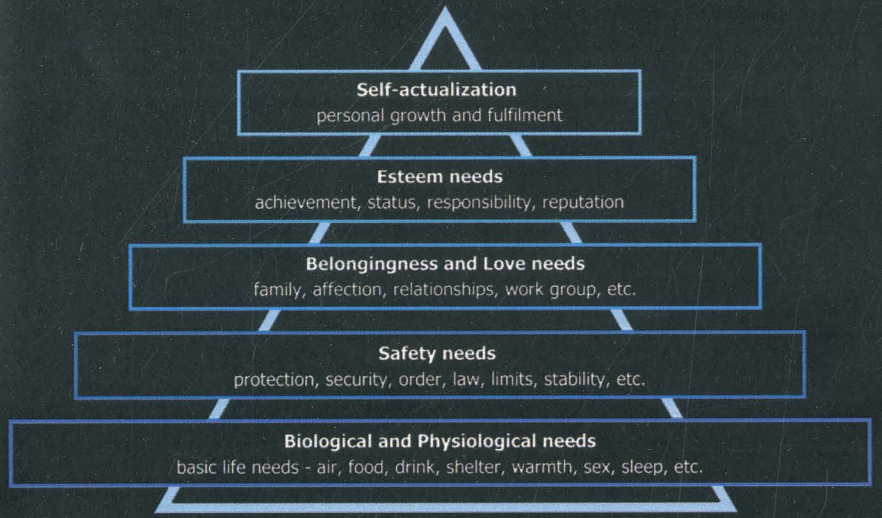
Located at the peak of Maslow's hierarchy of needs, he described this high-level need in the following way:

> *"What a man can be, he must be. This need we may call self-actualization...It refers to the desire for self-fulfillment, namely, to the tendency for him to become actualized in what he is potentially. This tendency might be phrased as the desire to become more and more what one is, to become everything that one is capable of becoming."*[1]

In his theory, Maslow gives examples of the self–actualizing process such as arts, music, poetry, or any other process that involves discipline, skill, concentration, and advanced learning such as teaching, psychology, pottery, basket weaving, and architecture, etc. In other words, self-actualization can be described as the culturization of a person.

1. Maslow & Lowry, *Dominance, Seld-Esteem, Self Actualization*, 1973.

Through this process, divisions in the brain increase, as new compartmentalization occurs, yet something new happens as some compartmentalization of neurological networks are resolved. Thus, integration occurs at the neurological level where it did not occur before. Furthermore, new divisions are created with new skills leading to personal growth and development.



Maslow's Hierarchy of Needs

Consequently, integration will manifest itself as glimpses of Maslow's "peak experiences." These glimpses are characterized as experiencing an inner peace of mind that one has never experienced before. Such "peak experiences" are directly related to one's specified learning process. For instance, a poet may experience a "peak experience" through an effort to write a poetry, or an artist through their effort to paint, i.e. through an intense and concentrated effort to see color, line, shadow, contrast, darkness, and light. Using this technique, and after much practice and utilization, colors are more acute, lines stand out, and shadow and light contrast more deeply. There is no easy way to reach "peak experiences" without discipline and hard work, for it is achieved through a learning process, which modifies the brain and integrates sensory, emotional and cognitive neurological networks.[1]

Maslow also defines self–actualization by stating that,

> *"Knowledge of the self is the disposition (need-desire) to focus one's ten senses of sight. Hearing, taste, touch, smell, feeling, thought, consciousness, memory, and experience upon the self. It is part of the growth process which brings about the cessation of the divided self, and the growth and creation of the integrated self."*[1]

This fascination with the senses emerged, partly because I see around me an immense flow of people rushing to various destinations without any consideration for the process, and partly because of the majority of the spaces that we inhabit, but unfortunately do not reflect much about us as humans, to start with.

Our built environments are charged with immense stimulations that we simply no longer respond to. We have become completely isolated from the outside. This over-stimulation has caused us to become detached and introverted at a sensorial level. Our bodies distractedly go through our daily activities without responding to the external environment. Routine dictates our movements and consequently, our awareness has become null. And going back to Maslow's hierarchy of Needs, we are not able to proceed towards the top of the pyramid, towards self-actualization.

1. Maslow & Lowry, *Dominance, Self-Esteem, Self-Actualization*, 1973.

Thesis Objectives

This brings me to a set of investigations that shall be challenged throughout my thesis project:

How does the sensory experience affect the perception of the spaces? What sort of architecture will grow from this attention to our entire human awareness and sensory capabilities? How can a corporeal-spatial encounter allow us to reconnect with our sensory perception and immerse us in a process of self-actualization?

1. Maslow & Lowry, *Dominance, Self-Esteem, Self-Actualization*, 1973.
2. Pikinois, *Sentimental Topography*, 1988.
3. Ackerman, *A Natural History of the Senses*, 1993. p. 304.

Sensory Intensification

The journey to self-actualization is an infinite process since our potential is infinite. Acknowledging the significance of the sensorial experience in the self-actualization process, sensory intensification will be adopted as the methodology.

> *"Knowledge of the self is the disposition (need-desire) to focus one's ten senses of sight. Hearing, taste, touch, smell, feeling, thought, consciousness, memory, and experience upon the self. It is part of the growth process which brings about the cessation of the divided self, and the growth and creation of the integrated self."*[1]

Dimitrius Pikinois states that through engagement is how we connect with the objects that surround us and it is through these connections that we understand the rest of the world. "...nature wishes to teach us: that nothing exists independently of the Universal Harmony...All things interpenetrate, affect, and change one another."[2] We cannot step back and examine things impartially, we are inevitable affected by that which we observe and it informs our conception of itself and our surroundings. It is through this intimate, interactive relationship that we sensuously understand the world.

> *"When scientists, philosophers, and other commentators speak of the real world, they are talking about a myth, a convenient fiction. The world is a construct the brain builds based on the sensory information it's given, and the information is only a small part of all that is available."*[3]

Kings never touch doors.

"They're not familiar with this happiness: to push, gently or roughly before you one of these great friendly panels, to turn towards it to push it back in place – to hold a door in your arms.
The happiness of seizing one of these tall barriers to a room by the porcelain knob of its bell; this quick hand-to-hand, during which your progress slows for a moment, your eye opens up and your whole body adapts to its new apartment.
With a friendly hand you hold on a bit longer, before firmly pushing it back and shutting yourself in–of which you are agreeably assured by the click of the powerful, well-oiled latch."[1]

1. Ponge, *Selected Poems*, 1994.
2. Ackerman, *A Natural History of the Senses*, 1993.

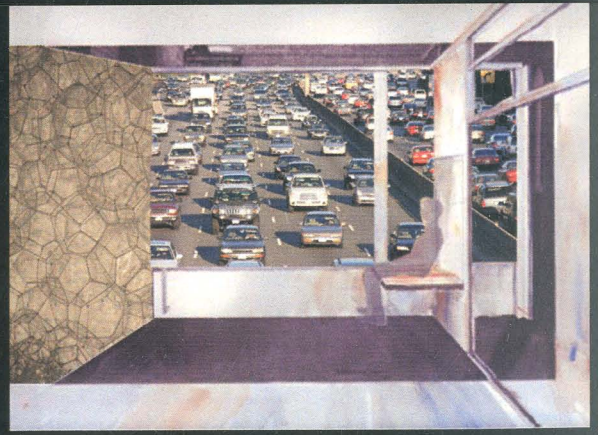
Sensory Intensification

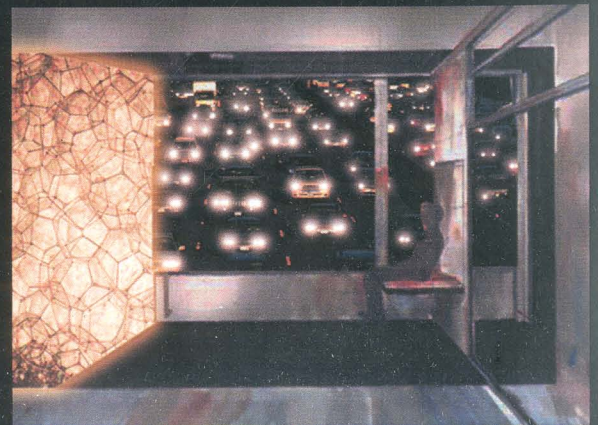
The kings in Ponge's poem resemble most of us, those who chose to be detached, not engaged, and disconnected. Those who will by far climb up to the level of Esteem Needs (Maslow's Hierarchy of Needs). It may seem simple, the act of opening the door; however, there is much to the action than seems to be. To open a door is to pass a certain threshold. It is the anticipation that complicates the act. Whenever you open the door, you cannot but hear the sound of the latch, feel the door knob, and be aware of the panel. It is the anticipation that enslows the act and makes you aware. Your total sensorial engagement created a certain perception that generated anticipation. Designing with sensory intensification as methodology aims to allow people like Ponge's kings to touch doors and enthusiastically open them wide. The challenge is therefore to reclaim sensory experience, and to re-tie the bridges that connect space, time, and body; to embrace rather than to suffocate, the breathing in of the world and personal growth of the human body.

"The body takes stock of the world...So it is not only possible but inevitable that a person will grow used to a city's noises and visual commotion and not register these stimuli constantly. On the other hand, novelty itself will always rivet one's attention..Then it is lost to astonishment, no longer an extraordinary instance but a generalized piece of landscape. Mastery is what we strive for, but once we have it, we lose the precarious super-awareness of the amateur."[2]

Sensory intensification involves a number of strategies that could be employed such as sensuous contrast, alerting one sense with another and sensory surprises.

Sensuous contrast refers to the fact that some of these more impalpable perceptions are only read, or at least strengthened, when experienced in its difference with another. For example, we take much more notice of the warmth of a building if we are coming in from a cold winter day. Also, the compression of a cramped hallway may be of little consequence to our perception of the space if it is being experienced only in reference to other tight spaces that come before and after it. However, if we walk through a narrow canyon that then opens onto a broad vista, the dichotomy of compression and release is abundantly clear. Standing in a transparent space overlooking the hustle of the city but not hearing it allows us to perceive the city differently. It suddenly slows us down and encourages us to reflect back on our daily life. We become more aware of the city we dwell in. We start to notice its presence that we take for granted.



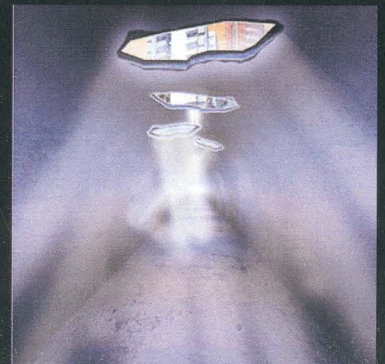


Left: Mute but Aware. Daytime/Nightime
Right: Dramatic Entrance

Sensory Intensification

Another way to draw attention to usually subconscious senses is through surprise and interruption of routine. As we inhabit and move through space we have certain expectations, and when those expectations are interrupted by something other than what we are accustomed, it creates an awareness of that event and the sensory effects it has. This could be applied in anumber of ways, one being the creaking of the floor. The change in acoustical aspects of the floor draws attention to the sound as well as other senses. A dramatic gesture that signals an entrance. The anticipation to see beyond this puncture in the landscape. The curiosity to see what's happening within the wall on the left. The pleasure of the serenity of the landscape in the front. A contrast is merely a spatial enticement.

All of these strategies are essentially based on the same broader principle, variability. This variability can come about from our interaction with the building as it is altered to fit our needs or from our changing perceptions of the building as we move through it. As we move in, around, and through the spaces of architecture our perceptions of those spaces can change drastically. This movement can be used as a driver for design as well as a method of controlling experience. The idea of the building as a stage for movement has been discussed at length. Even apparently static elements of the building can be used to control or reference our body's movements. The simplest example would be the effects of two different kinds of stairs. A gradual stair with long treads and landings interrupting the rhythm slows our movement, whereas a stair of a regular rise and run and few landings provides a continuous staccato rhythm that tells our body to keep moving and to do it quickly. Another experience is walking through an underground tunnel. Breaking the monotony of this enclosed space with cracking slots creates a disruption that requires the attention of the person walking. Getting glimpses of the cityscape as the light is fragmented by the cracks creates a dramatic awareness that completely alters the journey.



1. Ackerman, A Natural History of the Senses, 1993.

Sensory Intensification

"Our senses crave for novelty. Any change alerts them, and they send a signal to the brain. If there is no change, novelty, they doze and register little or nothing. The smallest pleasure loses its thrill if it continues too long. A constant state-even of excitement- in turn becomes tedious, fades in to the background, because our senses have evolved to report changes, what's new, something startling that has to be appraised: a mood to eat, a sudden danger."[1]

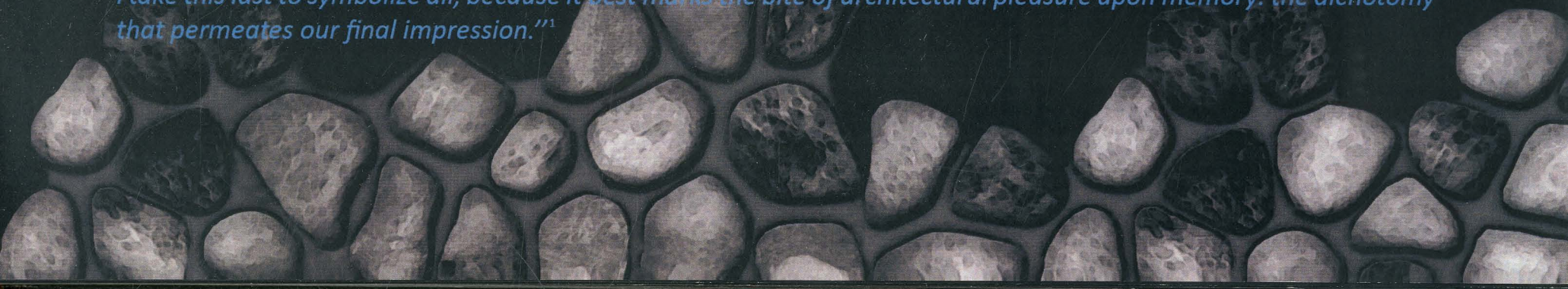
Using sensory intensification as methodology, it becomes critical to understand the senses, one has to understand the relationship of man to the world through each sense and its scientific side of perception. Another significant aspect to be explored is how perception through each sense affects us.

"So much of our life passes in a comfortable blur. Living on the senses requires an easily triggered sense of marvel, a little extra energy, and most people are lazy about life. Life is just something that happens to them while they wait for death."[1]

The importance of the visual in the full bodily experience of space is not questioned. Heavy emphasis is placed on the unconscious tactile qualities of visual perception. The eye is able to "touch" things at a distance through its link to our memories of previous haptic experiences of objects with similar qualities. Marleau Pont states, "through vision, we touch the stars and the sun."

In a description of a wall by Adrian Stokes, he elucidates the ability of a visual assessment to construct an almost tactile experience of an object and the physical attraction of aspects of imagery:

> *"...heaviness and lightness, sheerness and recession or projection, rectangularity and rotundity, lit surfaces and shadowed surfaces, a thematic contrast between two principle textures, that is to say, between smooth and rough. I take this last to symbolize all, because it best marks the bite of architectural pleasure upon memory: the dichotomy that permeates our final impression."*[1]

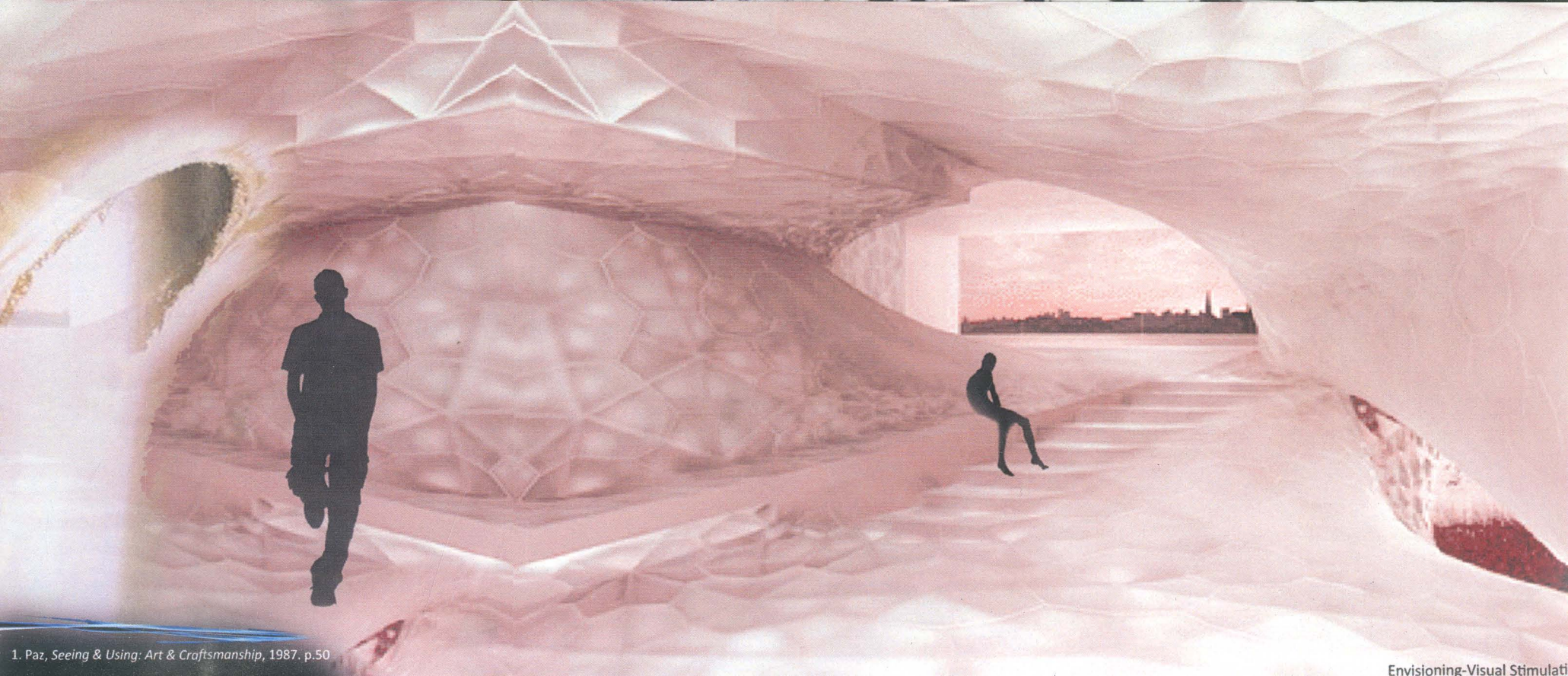


1. Bloomer & Moore, *Body, Memory, Architecture*, 1977.

Shadow is essential in this tactile engagement of the eyes. It is through shadow that we perceive depth and texture: without shadow we would not be able to perceive Stokes' all important smoothness and roughness without actually touching it. Ruskin wrote in his "Seven Lamps of Architecture" that:

> *"..among the first habits an architect should learn, is that of thinking in shadow, not looking at a design in its miserable tiny skeleton, but conceiving it as it will be when the dawn lights hit it, and the dusk leaves it; when its stones will be hot and its crannies cool...His paper lines and proportions have no value all that he has to do must be done by spaces of lightness and shadow."*[1]

He speaks of the changing character of the shadows from dawn until dusk. This gives life to a building. The character of the shadow on its face is ever-changing; a richly textured building always has a playful dance of light and dark across its surfaces. Shadow also provides mystery in our understanding of space. It dims the sharpness and clarity of vision, leaving the perception qualities of that darkened, obscured material to our tactile imagination. Unlike the homogeneous evenly lit environment, surfaces of texture and shadow invite liveliness and fantasy. It allows room for new connections that are woven by the body's imagination. It breaks the familiar and makes us aware of the surface engulfing us.



1. Paz, *Seeing & Using: Art & Craftsmanship*, 1987. p.50

Seeing and Using.

"A baked clay vessel.
Don't put it in the glass display case full of rare objects. It would show up badly.
Its beauty is allied with the liquid it contains and the thirst it quenches.
Its beauty is corporeal: I see it, touch it, smell it, hear it.
If it's empty it must be filled, if its full it must be emptied.
I take it by the turned handle as I would take a woman by the arm.....It is not an object to contemplate, but one for pouring something to drink."

The beauty of the vessel is best appreciated when it is used, when the person gets engaged with its existence. Marveling at its beauty from a distance will only demean its splendor. Spaces should be thought of in the same delicate manner. They are not to be viewed from a distance. They are much more than images. Vision is never a two dimensional perception. Looking at the vessel in the display case constitutes one of several sensorial aspects that eventually allow us to appreciate the vessel. Using the vessel requires a complete involvement. Paz says, "its beauty is corporeal: I see it, touch it, smell it, hear it."

Understanding our own role in the image we construct of the world around us is not something that we easily comprehend on a daily basis. Yet, understanding our role raises awareness; hence the idea of activating the observer becomes essential to encourage involvement. This relationship between the world and the observer is dealt with in one of the art installations by Olafur Elisasson. All his installations are based on ideas about perception, sensory stimulation, and how the human body reacts to it.

In this installation, Sensing 2001, a large amount of vertical strips of mirror are placed next to each other on a window, spaced with their own width. As a result you get both the mirror image and the image behind the mirror presented to you, because your mind constructs a whole image from the different strips.

"You're not only a productive, phenomenological active subject; you're also produced by the piece. You become that subject-object, that ambiguous space where, as Maurice Merleau-Ponty would say, everything takes place."[1]

1. Quote by Elafur Eliasson.

Sensing 2001, Olafur Eliasson.

Daniel Birnhaum says about the installation in an interview with Eliasson: "You can pretend, with a small syncope that you see yourself seeing, but it's very hard to be a subject, or rather very hard to be a self-reflecting subject. Either you look through, and then you're a subject looking for something else, or you look at yourself, and you turn yourself into an object, a mirror image. Both pieces remind you of the fact that you're an experiencing mind, that you're a subject- you're subject and object..." What Eliasson thus tries to accomplish with this installation is to place the subject actively within this ongoing dialogue. By doing this, the ever-present dialogue becomes expressed, intensified and refined.

Hegemony of the Image

Unfortunately, vessels are all over our display cases. Nowadays, the image dominates our lives and consequently, leaves no room for bodily interaction. Image is static. And vision is not about image. The image is fixed in time and position. The property of the image as fixed in time means it is always a representation of the past, or a promise of the future. It also means that you cannot choose the perspective and relate different spaces to each other. Even when using virtual spherical images that allow you to change the direction of your view, there is not the possibility to take a step forward to acquire a different perspective. Images kill awareness.

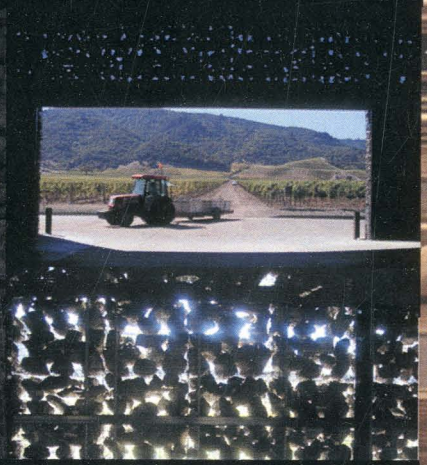
The static quality of the image can easily be eradicated the moment we start seeing things and not just looking at them. Once we realize the capacity of vision to touch, no image will any longer appear static. For instance, when you look at a painting from a distance you see the image or depiction; this is the first layer of meaning. The brush strokes provide essential information on the painting technique used, adding a second layer. The cracks in the paint give information on the age of the painting. In this sense the visual can provide a much richer array of information than merely the image. But that can only happen if one sees and most importantly, if the image itself entices the actor to approach, see, thus touch.

Weather Project, Olaffur Elisasson, Tate Modern Museum, 2003

The Weather Project is an art installation by Olafur Eliasson in the Turbine Hall in the Tate Modern, London. The volume of the hall is extremely huge as it used to house the turbine before the building was changed into a museum. Eliasson installed a semi-circled artificial lighting with an effect resembling that of the rays of the sun. The sun became a complete circle after he installed a mirror along the entire ceiling. This gave the hall further depth when perceiving it from the ground.

At the time the 'Weather Project' was present in the hall, the number of people that started to lie down on the smooth floor increased significantly. Because of the imitation of a setting sun in combination with a high degree of humidity made the space feel even more natural and relaxing. It was interesting how people started to conceive of the place. Some people would come during their lunch break. The young use it as a place to hang out. Others think of the effect of the space as non-terrestrial; it elevates them to outer space. Lovers stand on the mezzanine hand in hand enjoying the soothing and "magical" qualities of the setting.

Light and reflection crafted a whole world of perceptions. Perceptions based on vision as much as its tactile qualities.



Dominus Winery, Herzog & de Meuron, California, 1998.

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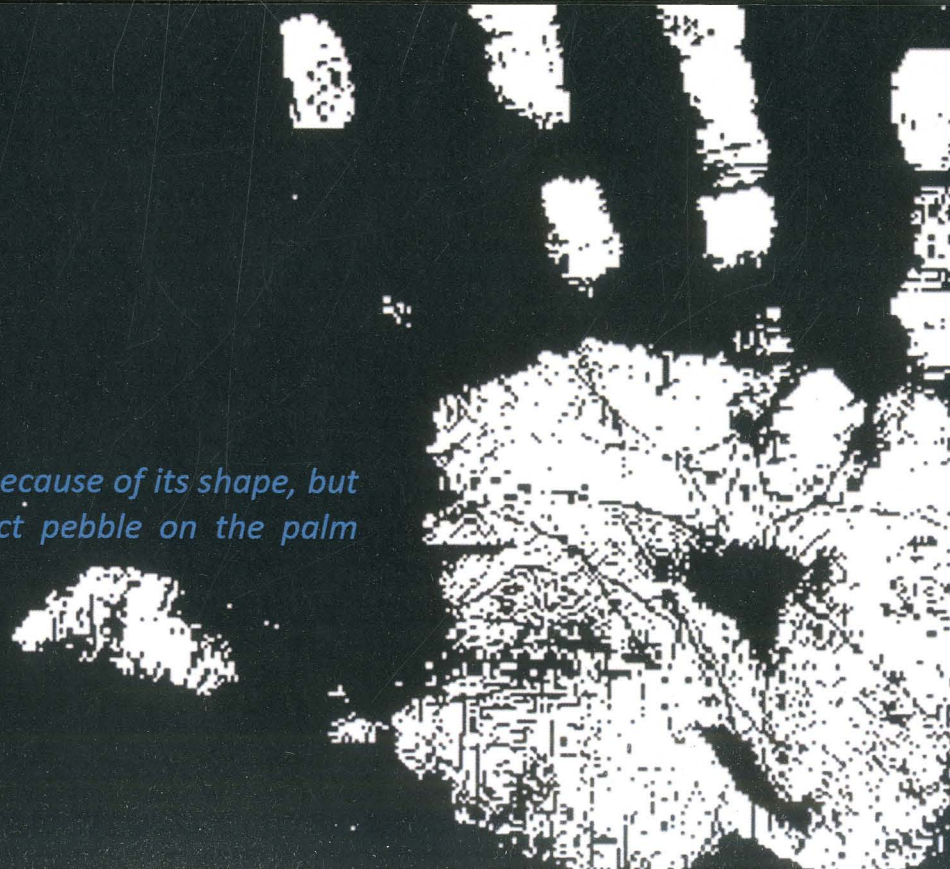
Light and reflection crafted a whole world of perceptions. Perceptions based on vision as much as its tactile qualities.

" a pebble polished by waves is pleasurable to the hand, not only because of its shape, but because it expresses the slow process of its formation; a perfect pebble on the palm materializes duration it is time turned into shape."[1]



1. Pallasmaa, *The Eyes of the Skin*, 1996. p.41
2. Gibson, *The Senses Considered as Perceptual Systems*, 1968.

The haptic sense is a sense of action. It perceives movement kinesthetically, and even when feeling static objects we move our skin across them to understand their tactile qualities. Through our haptic memory, we find the fundamental knowledge of the hunter, the farmer, and the fishermen...These skills are "...learned through incorporating the sequence of movements refined by tradition, not through the words of theory." This memory of habit and event is even stronger than visual memory and academic knowledge.

A recent psychological study concerning topistic memory supports this. A group of ranchers in Montana were interviewed and asked to describe the environment in which they live and work. Their answers all illustrated their ranches through the events of daily life and haptic experience. When asked about the barns, they did not describe the visual image of the barn but told about the act of building and maintaining it. The sheep was described in terms of its warmth in winter during the graveyard shift of lambing season. It was always the haptic experience of events that pervaded the memory of place.[2]

Tradition and habit are sensed haptically not only through our memories, but also in our perceptions of objects that have been affected by time and retain traces of use. "An old object polished to perfection by the tool of the craftsman and the assiduous hands of its users, seduces the stroking if the hand."[1] We take pleasures in feeling the grooves and smoothness created by the thousands of hands that came before us. Stokes advocates the importance of touch as he describes the weathering of stone, " A single shape is made significant by perennial touching. For the hand explores, all unconsciously to reveal, to magnify an existent form. Perfect sculpture needs your hand to...reveal subtleties unnoticed by the eye, needs your hand to enhance them."[1] This residual tactile quality of time also connects us to the environment's effect on objects such as Pallasmaa's description of the pebble.

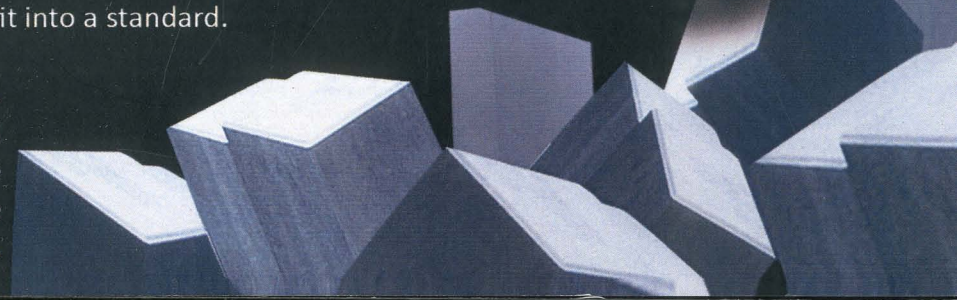
1. Montagu, *Touching: The Human Significance of the Skin*, 1971. p.XIII
2. Pallasmaa, *Hapticity and Time*, 2000. p.85

Haptic Deprivation

We seem unaware of the vast range of capabilities the skin has, the fact that every sense is based on having a kind of skin and the incredible sensitivity it can have. One of the advocates for a more elaborate understanding of the skin and its haptic properties is Ahsley Montagu, "The skin is the oldest and the most sensitive of our organs, our first medium of communication, and our most efficient protector...Even the transparent cornea of the eye is overlain by a layer of modified skin....Touch is the parent of our eyes, ears, nose, and mouth. It is the sense which became differentiated into the others, a fact that seems to be recognized in the old-age evaluation of touch as 'the mother of the senses.'"[1] Whether the skin is really the 'mother of the senses' is besides the issue, what is significant here is that all the senses can be seen as somehow making use of some type of skin as a receptor.

Thus, this renders the touch, a sense at least equally sensitive and accordingly probably also equally important to the other senses. Juhani Pallasmaa in is article, "Hapticity and time," states that, "The architecture of eye detaches and controls, whereas haptic architecture engages and unites. Tactile sensibility replaces distancing visual imagery by enhanced materiality, nearness and intimacy."[2] The haptic is here fully recognized by Pallasmaa as a layer of meaning, a layer with a more sustainable character and able to unleash more profound emotions than the layer of the image alone. The general matter, however, is that the haptic has been completely discarded over time. Surfaces or materials are primarily judged on how easily it is to clean then, what color they have, that they don't age, or whether they can be prefabricated to fit into a standard.

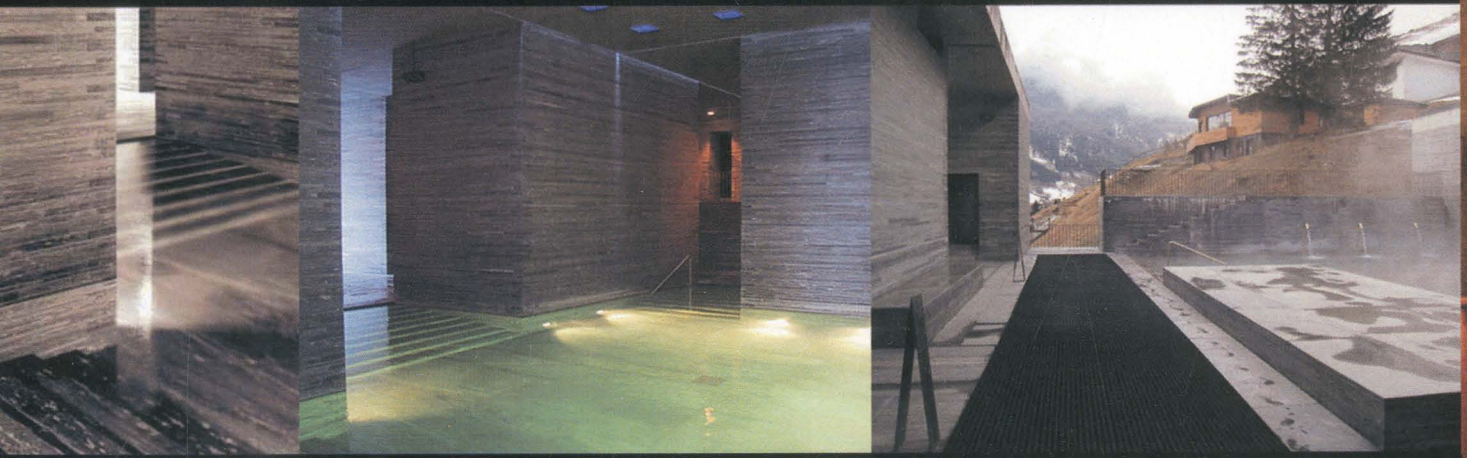
Plastered concrete surrounds us everywhere. Shiny glittery tiles cover our floors. Yet, when we remember our old houses, we never mention the plastered walls and shiny floors. We describe in great detail the ceiling that is soaked with water and the plaster drawing maps on the wall as it pulls off. We remember elements that are associated with our intimate haptic memories like the group of ranchers in Montana.

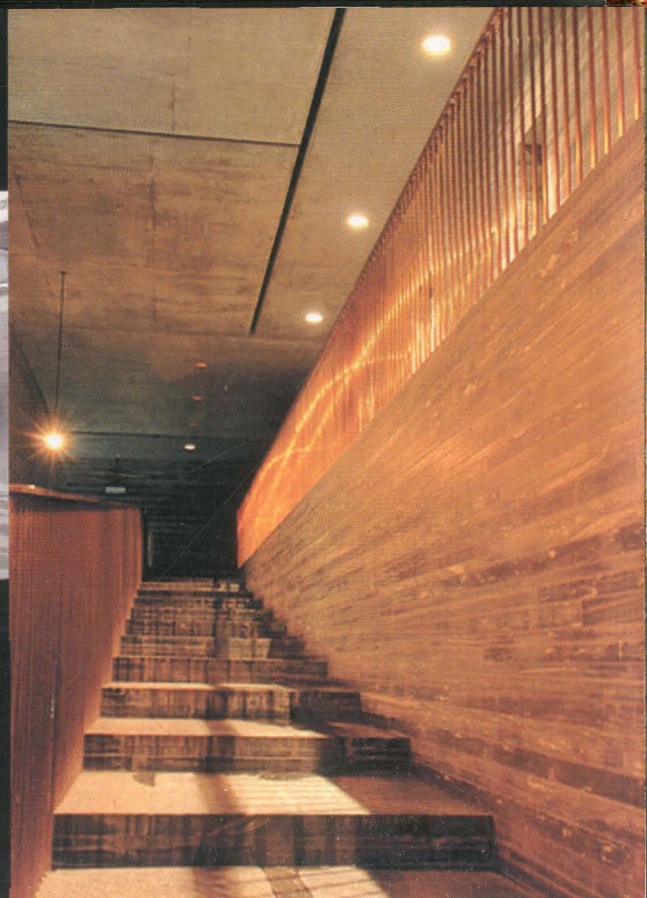


Brion Verga Cemetery, Italy, Carlo Scarpa, 1972.

A cemetery is a place that is charged with immense feelings of loss, grief, mortality, and memories. Scarpa's design of Brion Cemetery intensifies such turmoil of emotions by allowing the individual to reflect on them. His use of concrete in different forms, wood, water, and earth create a harmonious journey in which the person is haptically engaged in the process. The hapticity of the cemetery then plays a role in the mental journey of the person as memories of the past are recollected. The roughness of the sarcophagus, the reflection of the sky in the water, the softness of the grass, and the texture of the wooden door are sensorial stimulations that ask the body to be present and aware at each step.

Haptic Perceptions are opportunities to recollect vivid moments from the past.

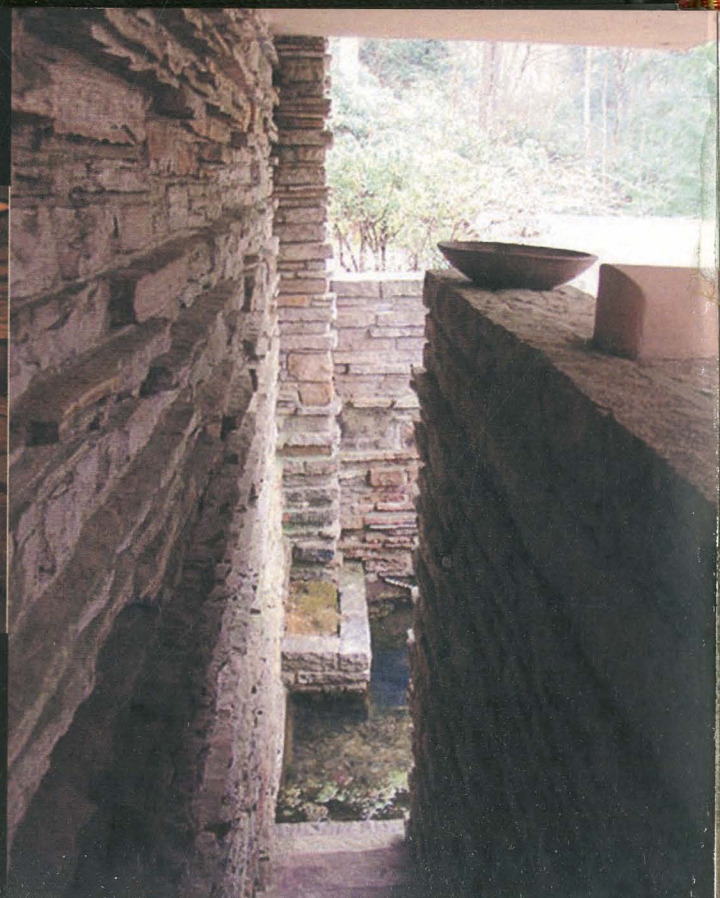




Therma Baths, Vals, Switzerland, Peter Zumthor, 1996

Zumthor's thermal baths are caved-liked rooms sequenced and sized based on temperature, smell, sound, and the body has direct contact with varying degrees of textures. Zumthor's words regarding Vals describe the power of the sensorial experience, "Right from the start, there was a feeling for the mystical nature of a world of stone inside the mountain, for darkness and light, for the reflection of light upon the water, for the diffusion of light through steam-filled air, for the different sounds that water makes in stone surroundings, for warm stone and naked skin, for the ritual of bathing...So our bath relies on the silent, primary experiences of bathing, cleansing oneself, and relaxing in the water; on the body's contact with water at different temperatures and in different kinds of spaces, on touching stone."

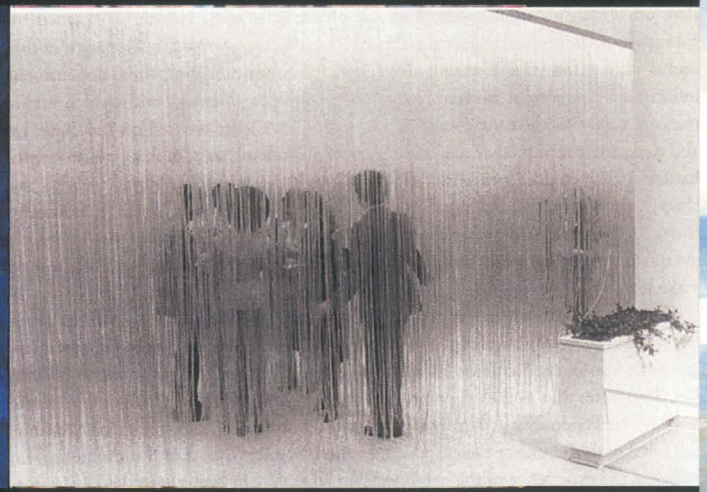
Interiors crafted to carry the structure's persona that soon becomes part of the body in contact with it.

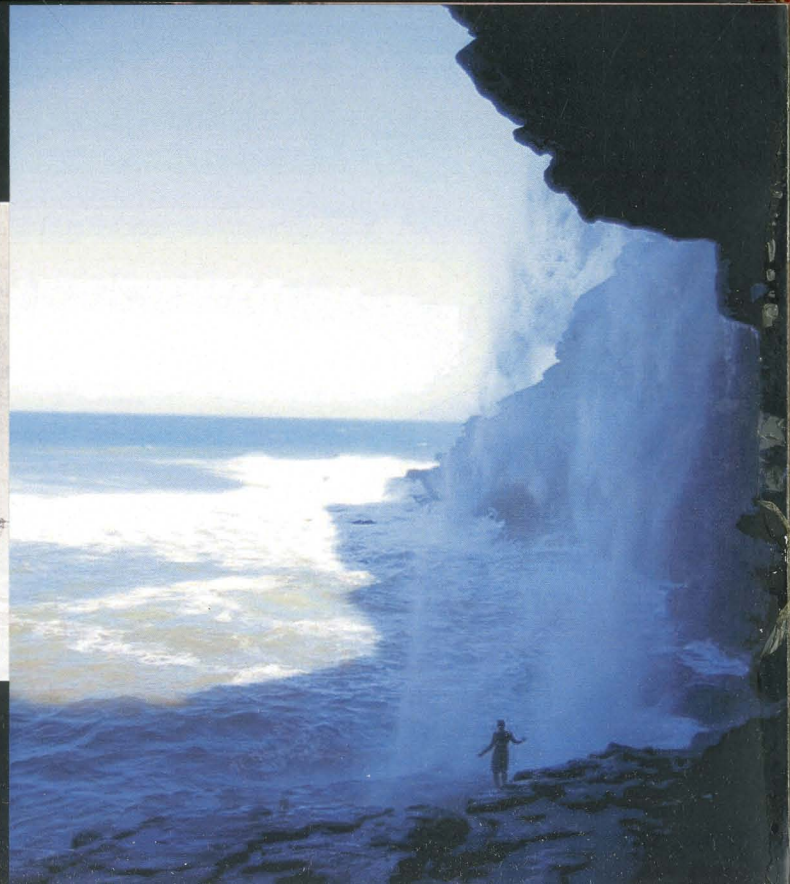


Fallingwater, Pennsylvania, Frank Llyod Wright, 1948.

Fallingwater is an enclosure of rough Stone, wood, water, and irregular ground that allows the person to dwell in nature and no longer feel a boundary. The following is the experience of one of the visitors to Fallingwater, "As I stood in the entry to Fallingwater, my mind became quiet. I felt the damp stone, I saw a strong contrast of light, which revealed texture, I smelled the earth, I heard the sound of a waterfall and I felt the constricted yet natural spatial enclosure. All of my senses were being used to interpret this space. I knew nothing of the tartan grid or the translation with which Frank Lloyd Wright had developed this design. I knew nothing of the symbolism of the crystal that may have been present. I was just quiet. I was simply in its presence."

The pleasure of touching the stone, walking on rough ground and hearing the falling water.





Sound of Water

Intimacy of Sound

We can hear architecture through the sound it reflects into us, giving us impressions of the shape and the character of the materials that create it. Sound is a powerful aspect of spatial experience. Sound surrounds and fills us; it gives us a sense of interiority and connection. We can comprehend the whole of a space through its acoustics as we hear its reverberations. This immersive quality of sound gives life to experiences. Imagine the difference between going to a sporting event and watching it on television. Sitting in the stands, the roar of the crowd is felt as much as it is heard; it hits deep inside, enveloping and absorbing individuals into a forceful collective experience as the sound resonates through their bodies.

The acoustics of a space gives us a sense of its occupation. An empty hall sounds quite different from the same space filled with bodies. Walking into a house blindfolded, one could easily discern an empty room from one that is lived in, filled with the objects of everyday life baffling the sound. The harsh echo of uninhabited space makes it feel cold and hard; the acoustical absorption of lives gives it a comforting softness and warmth. While it generally remains an unconscious segment of experience, sound plays a significant role in our emotional perception of space.

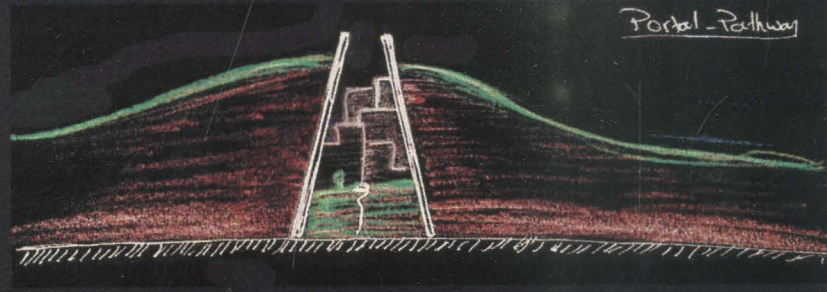
Sound can gives us a sense of location. The crash of waves is heard at a greater distance than they can be seen, expanding the area claimed by the seaside. This intimacy and distinctiveness has been lost in the contemporary city. Juhani Pallasmaa says,

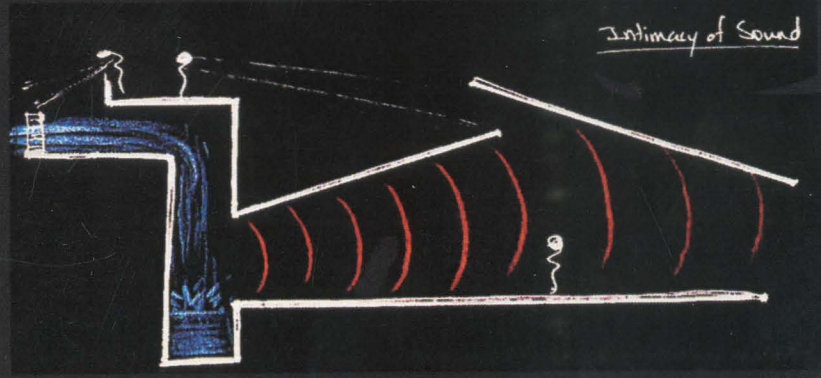
"The echo of steps on a paved street has an emotional charge because the sound reverberating from surrounding walls puts us in direct interaction with space; the sound measures space and makes its scale comprehensible."

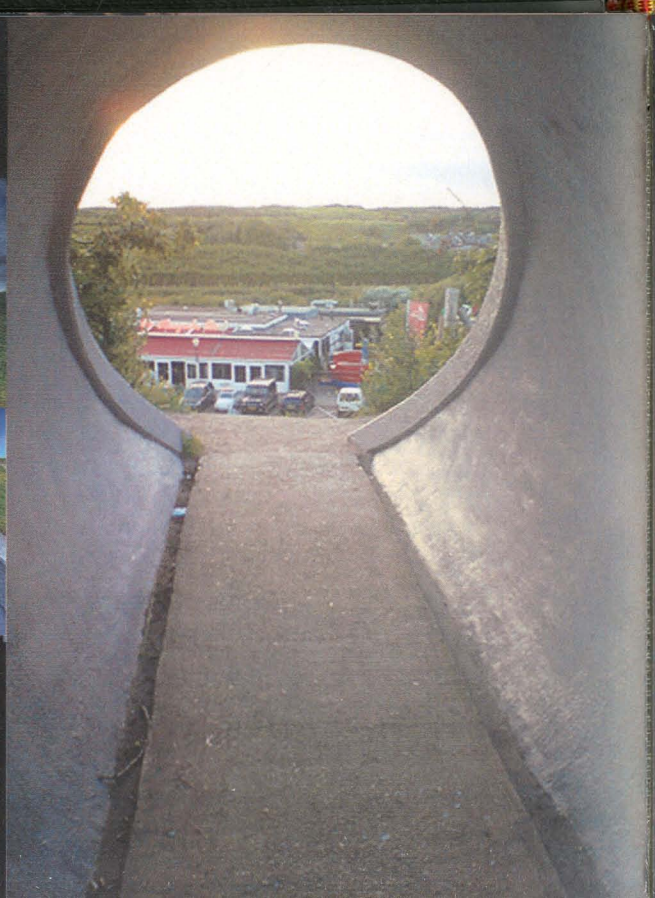
Guided by the Sound of Water-Envisioning

The broad car filled streets do not return the sound of our footsteps. What little unique acoustical character our city might have today is lost on the masses, who wander through with cars plugged by the music coming from their iPods or being pumped through the speakers of shopping malls.

Intimacy of sound can signal sensory cues that could inform the movement of the body. Following the sound of flowing water, the echoes of the footsteps, the vibrations of the traffic, the wind blowing through the trees and the absence of sound are sensorial thresholds throughout the journey. Once, in the presence of the source of the sound or its absence, the journey ends to a destination.







Hemels Gwelf, Den Haag

Hemels Gwelf, Den Haag, James Turrel, 1996.

Turrell created a place to gaze at the sky: 'Celestial Vault'. At the top of one of the rubble dunes, a bowl in the shape of an ellipse has been built, 30m wide and 40m long. A wall of earth, approximately 5m high encloses the bowl. In order to reach this artificial crater you first climb up part of the dune on wooden stairs and then walk through a 6m long concrete passageway. The slopes on the inside of the crater have been sown with grass and a natural stone bench is in the middle on which two people can lie back and observe how the sky is a vault. The crater is located next to a highway, so most observers expect to be isolated from the sounds of the noisy highway as they enter the crater due to the thick wall of earth. However, due to the conical concrete passageway, the sound of speedy cars gets amplified inside the crater. For Turrell, light, sound and space themselves are the object and one of the points he wants to make is that, during the act of observation, the observer should experience that he/she is observing with full awareness to the surroundings.

A transit soundscape witin landscape. A vault half earth half sky. A place to gaze while being aware.

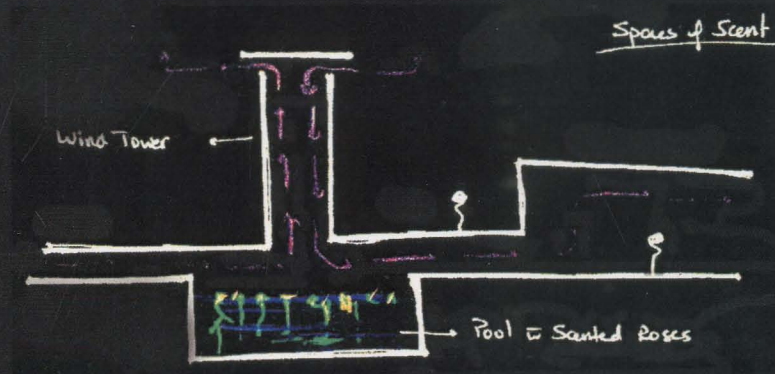
"Who that has reason, and his smell,
Would not among roses and jasmines dwell,
Rather than all his spirits choke
With inhalations of dirt and smoke?"[1]

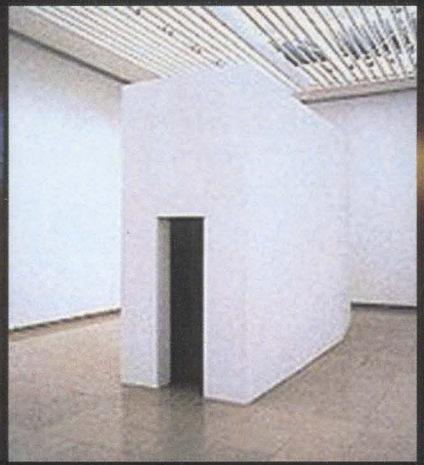
1. Ackerman, *A Natural History of the Senses*, 1993.
2. Hall, The Hidden Dimension, 1969. p. 50

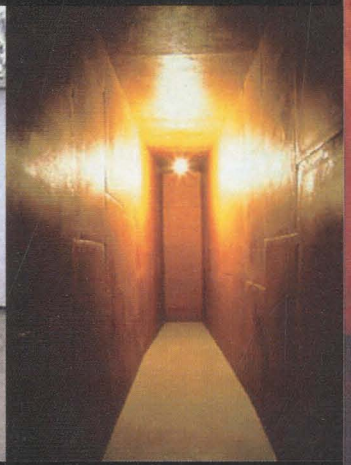
Smell has a powerful connection to memory and emotion. Scents are cataloged by our brains in reference to significant memories. Stimulation of specific smells can cause an involuntary recollection of the past experience it is associated with. These memories are stringer than those of visual and auditory perception and do not fade with time. Definition of space through scent has untapped potential for architecture, whether it is used to prompt a return to some emotional state elicited by memories, or simply to create an awareness of arrival or transition. Spaces of scent can provide, '' a sense of life; the shifts and the transitions not only help to locate one in space but add zest to daily life.''[2]

''Unlike other senses, smell needs no interpreter. The effect is immediate and undiluted by language, thought, or translation. A smell can be overwhelmingly nostalgic because it triggers powerful images of emotions before we have time to edit them.''[1]

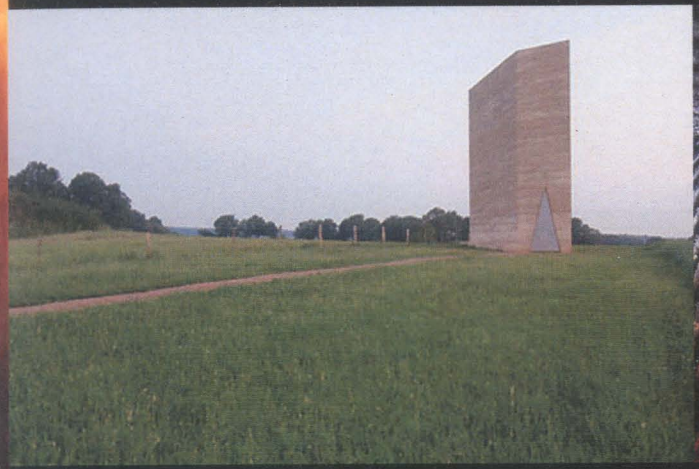
Ackerman's quote has scientific basis to it. While the other senses must send messages to the lower part of the brain first to be processed and sent on to the cerebral cortex, the nose's nerves cells are directly connected to this part of the brain. And from the cerebral cortex, smell signals are sent directly to the limbic system, the part of the brain which deals with feelings and memory. Thus smell connects to both the cortex, which is the zone of cognition, and the limbic system of the hypothalamus which deals with memory and emotion, the non-cognitive zone. This allows for the brain to process smell simultaneously in terms of cognitive and precognitive responses. The memory of smells becomes deeply embedded, powerful triggers of the past.







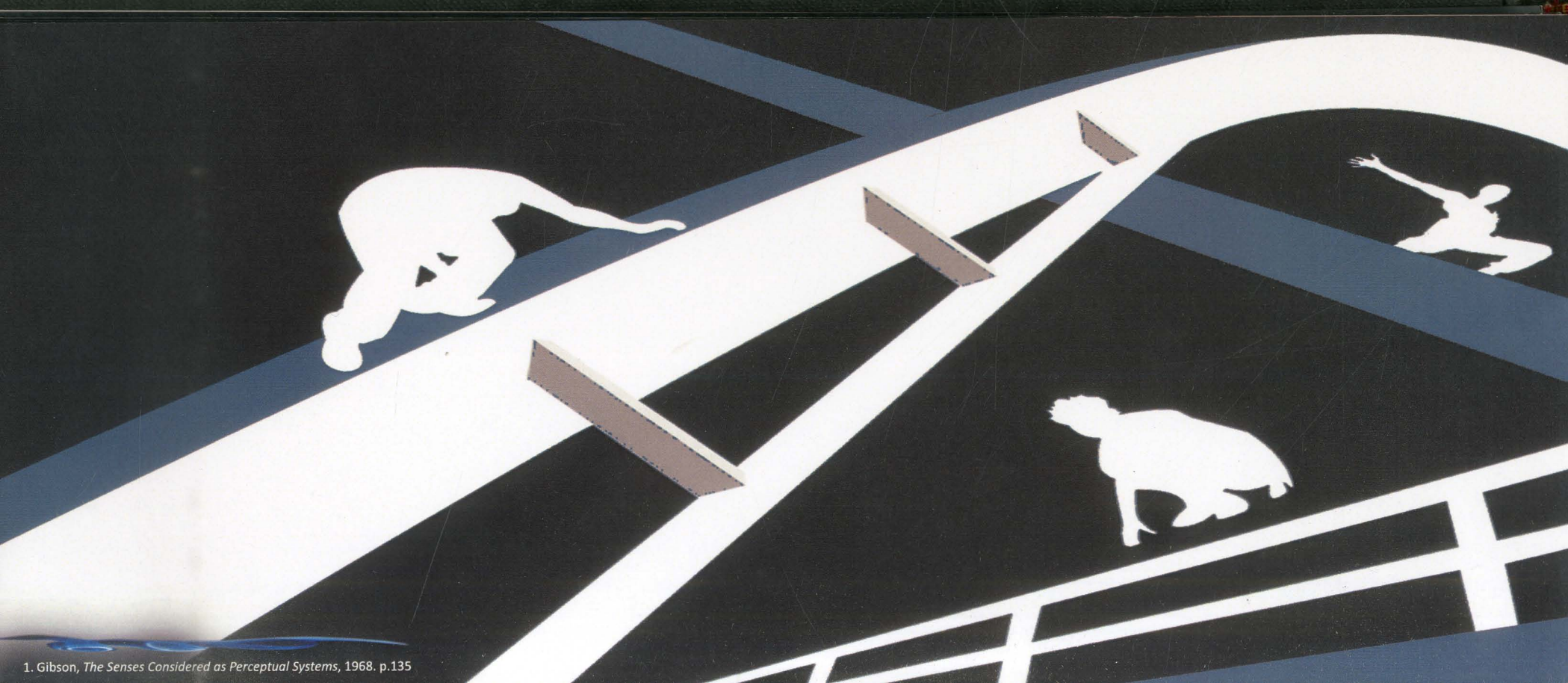
Wachsraum, De Pont, Tilburgl, Wolfgang Laib, 1992
Brother Claus Chapel, Germany, Peter Zumthor, 2007



Waschrum De Pont: A small dark hole in an otherwise very large and light exhibition space. A hallway with a bend in it. Once you are in, you cannot see the end. The walls are made up out of slates of beeswax. The space is saturated with an intense breeze of wax. At the end of the hallway, there is a small light bulb, which seems to heat up the wax around it, which makes the smell more protruding. A pleasant space with a sweet smell.

Brother-Claus Chapel: Zumthor used a technique called "rammed concrete" where farmers poured a layer of concrete over a teepee of timber every day for 24 days, leaving a texture similar to that of rammed earth. The timber was then burnt out by colliers, using the same process as making charcoal, leaving a charred inside. Thus, the chapel is perfumed with a smell of incense.

"Hit a tripwire of smell, and memories explode all at once. A complex vision loops out of the undergrowth."



1. Gibson, *The Senses Considered as Perceptual Systems*, 1968. p.135

Kinaesthesia doesn't consist of a single organ nor has any other physical expression. One understands kinaesthesia in a subconscious way without being able to explain it. Everyone actually experiences kinaesthesia at any moment of the day and because of this, you don't know how life is possible without it. To start this section on kinaesthesia, I'll quote the words of Diana Argest in her article about representation in architecture:

> *"Other senses beyond the limits of the visual and the spatial, such as audition and metonymically, the entire body through time, rhythm, movement, and speed, become relevant as part of representation. Speed, a dimension inseparable now form space-time, is perceived with the entire body and in particular through the vestibular, a sixth sense that, named after the inner ear, accounts for balance, motion sickness, dizziness, and vertigo."*[1]

Kinaesthesia is dependent on outside circumstances, causing a physical reaction after processing kinaesthetic feedback in the brain. This abstract description of the process reveals some of the similarities with sensory experiences. Senses receive stimulation from the outside and process them into a brain signal causing emotion. The notion of an outside influencing the brain inside can thus be seen as a common process between both. The difference is that the senses are extremely subjective and connected to emotions. On the other hand, kinaesthesia is objective and almost mathematically influencing physical movements.[1]

A dictionary definition describes Kinesthesia as, '' A sense mediated by the end organs that lie in the muscles, tendon, and joints and are stimulated by bodily movements and tensions. A perception of body position, movement and muscular tension in relation to space.''[1] What is interesting in this definition is the last part, ''in relation to space.'' This suggests a string link between the movement of our bodies and the direct environment.

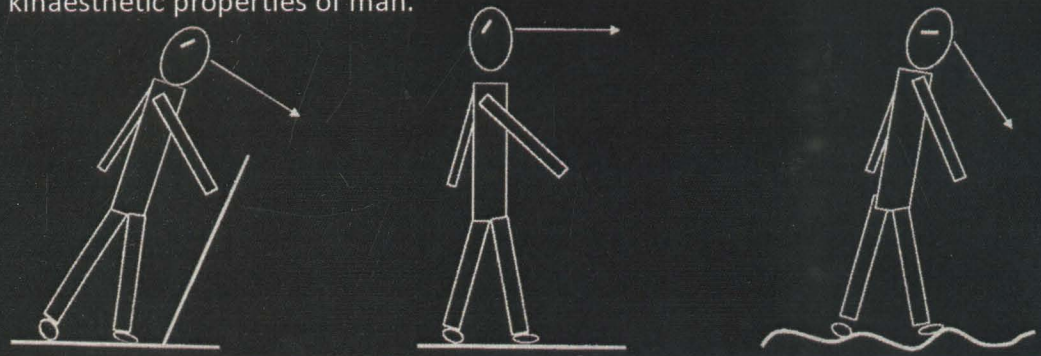
Having established kinaesthesia as being a physical and reactive phenomena, I will use Gibson's definition of the term, "the discrimination of body movement from non-movement is too important for the organism for it to have been wholly entrusted to any single group of receptors. There are many kinds of movement that need to be registered. Articular, vestibular, cutaneous, visual. In all theses perceptions, the sensory quality arising from the receptor type is difficult to detect, but the information is perfectly clear. Next to the properties already mentioned, this definition stresses that kinaesthesia is about bodily movements. This is what makes it relevant to architecture, since architecture requires movement in order to be properly perceived. This movement is not limited to walking, but can also be head-movement, leaning, or movement of the eyes. It is something everybody does, but the sophistication of this ability can apparently vary due to differences in experience and environment.

An interesting practice dealing with this notion is "Parkour." Parkour is an urban sport that emerged some years ago. It uses the urban environment as its playground. The goal is to move as fluent as possible over a trajectory through the city, going over or through the elements and buildings one encounters in the city instead of turning around them. However, this sport is diminishing with time as our current urban contexts provide little variation. The actual existence of this sport proves the inner need of people to test the limits of their physical capabilities.

"All architecture functions as a potential stimulus for movement, real or imagined. A building is an incitement to action, a stage for movement and interaction. It is one partner in a dialogue with the body."

1. Ando, Shintai and Space, 1988, p.3

Relating kinaesthesia directly with design, such considerations can be found in the theories behind Japanese gardens. What appears to be common in the design of these gardens is that they are very much conceived from a movement perspective. Edward Hall has studied the Japanese garden in relation to cultures and space, "... stretching visual space by exaggerating kinaesthetic involvement... to watch his step as he picks his way along irregularly step stones.... At each rock he must pause and look down to see where to step next. Even the neck muscles are deliberately brought into action play." The Japanese designer seems to take into account the influences of the direct environment, even to the scale of the surface, on human perception of space as a result of kinaesthetic properties of man.



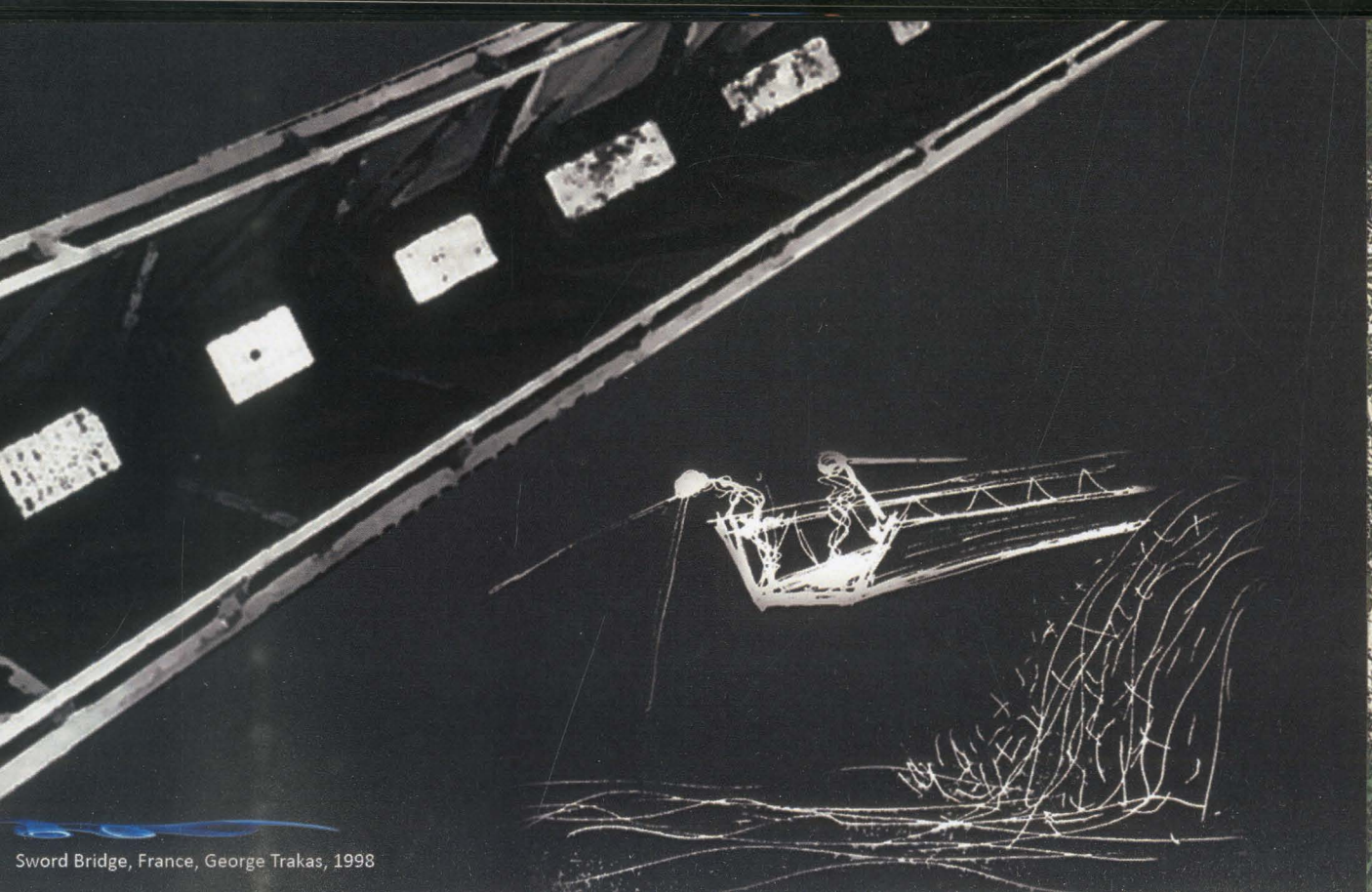
1. Hall, The Hidden Dimension, 1969.

Kinesthetic Deprivation

Kinesthetic deprivation is a symbol or catalyst for a bigger issue of self-awareness and self-confrontation in society. So it is quite a technical device, which can be improved by learning and requires maintenance. Strictly speaking, kinaesthesia is not sensory because it doesn't directly give a bodily emotion; however, it can affect the senses greatly and our experience of space. This notion of kinaesthesia is relevant due to the increasing comfort devices we have developed over time, allowing us to use this device much less diversely and frequently. These comfort-increasing devices are for instance cars, air-conditions, and elevators. Also the way cities are designed nowadays has changed, something heavily criticized by Edward Hall in his book "The Hidden Dimension":

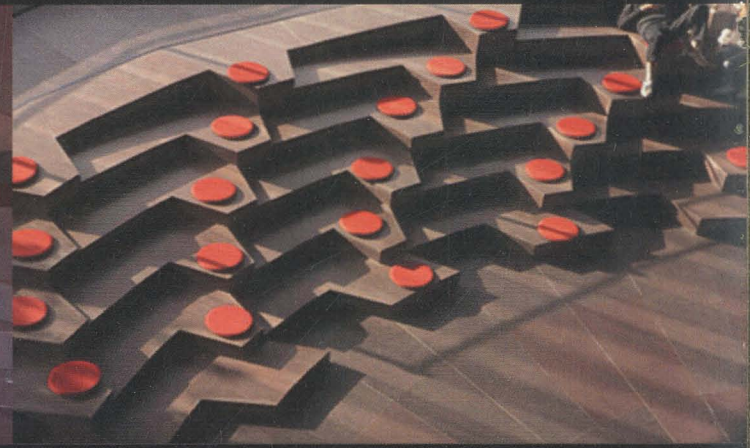
> *"Our urban spaces provide little excitement or visual variation and virtually no opportunity to build a kinaesthetic repertoire of spatial experiences. It would appear that many people are kinesthetically deprived and even cramped."*[1]

Not only does the city contain too little moments of kinesthetic stimulation like Hall addresses, we are also totally unaware of the possibilities to attract, stop or speed up people as far as city planning goes. Next to this, we seriously underestimate our bodily capabilities since there is never a moment where we are seriously challenged to explore them.

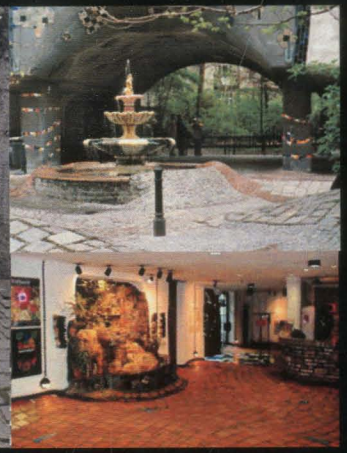


Sword Bridge, France, George Trakas, 1998

Kinaesthesia becomes extremely significant to control the circulation of various actors: the movement of people towards the project, the entry, the movement from one space to another, the way from parking to the destination. Its importance lies in its ability to create spatial awareness. The journey is no longer just to get from point A to point B, but to notice the elements on your way. This is evident in the Sword Bridge by George Trakas who designs art installations that are based on perceptions and movement in space. He is using his knowledge of kinesthesia to create awareness with the visitor. His installations are sequences of different materials, angles, slopes, and widths; he re-activates knowledge within man about how to move. Trakas relates this knowledge of movement to behavior in order to create orchestrated routes. These routes are an alternation of moments creating awareness or challenge, guiding and testing you at the same time. He succeeded due to two simple design gestures: the oblique sloping of the handrail, and the perforated ground of the bridge. The inclined handrail forces the curious body that wishes to enjoy the view of the waterfall to lean, a conscious body movement. The perforated ground makes the journey a bit uncanny. Those who are adventurous will deliberately step on the grilled parts whereas those who are less adventurous will tend to walk on the solid ones. A journey molded by simple spatial features.



Serpentine Pavillion, Olafur, Eliasson
Brion Cemetery, Italy, Carlo Scarpa, 1969
Hundertwasse House, Vienna, Fredrick Hundertwasser, 1991



In each of the cases, the movement of the body in space is challenged. Due to this challenge, the space starts to interact with the body. Such interaction creates moments of awareness of the immediate environment. A person suddenly becomes conscious of every single step.

The step becomes a decision. The person is in the moment.

Journey through Site

Cars surround me
Noise is all around me
Smoke & dust is all I can smell
Buildings on my right and left
A green patch resides in the front

A Tree surrounded by concrete
A mattress of green slopes ahead
Clusters of trees wave at the end
Curves of mountains appear dead
Speedy cars sweep by on my left

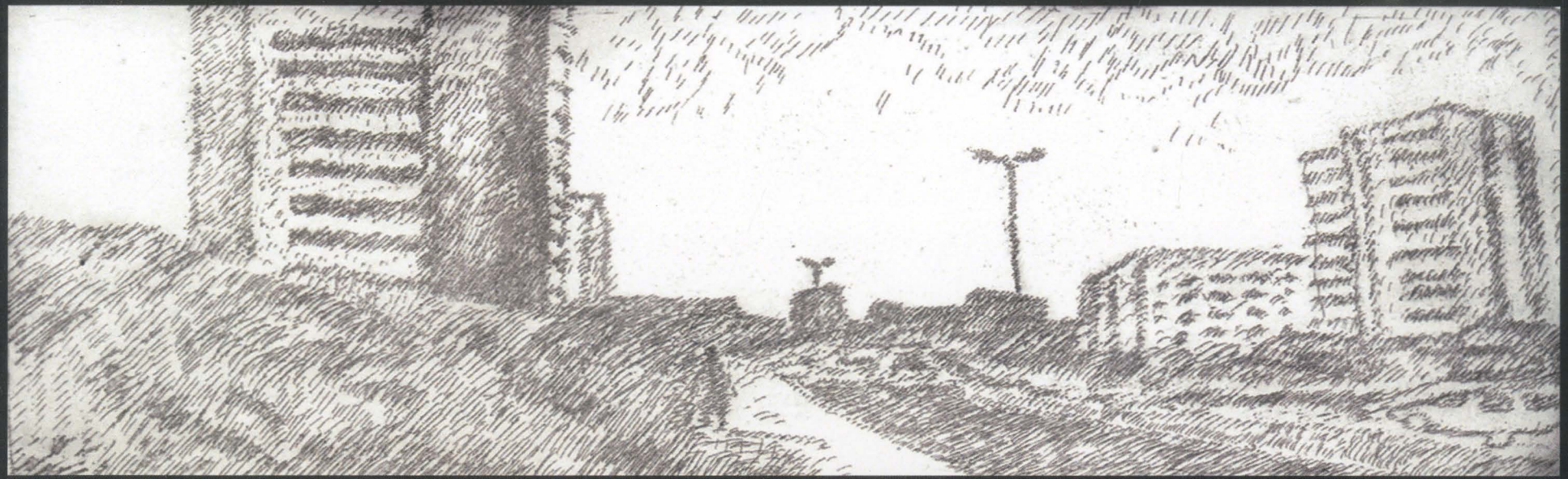
Soft grass squeaks under my feet
Speedy cars are still heard
I move forward
I wonder what this mattress of grass blocks
No sight of the other side yet

A cityscape is revealed
The green mattress still slopes
The clusters of trees are a few steps ahead
I continue to move
I am heading towards the trees

I turn around
Another cityscape is revealed
Concrete blocks sticking out of the hill
Sound of speeds cars is barely heard
Smell of fertilizers fills the air

Between the trees I reside
Enjoying the sound of trees against the leaves
Old trains framed by green
A cityscape in the background
Away yet still there

Site Sketches, Etchings



Districts surrounding Site

The basic criterion behind a site for such investigation is that it should be charged with urban over-stimulation. The site should be a node among various districts housing a variety of everyday city activities. It should also exist within an immense flow of people. The topography of the site should be a bit complex, in other words not flat in order to allow for movement throughout the site and different ways of looking back at the city.

The site is not a place to be isolated from the city but rather an extension of it. The project on such a site will aim to become part of their daily life, a transitional space along their daily journey, a place to fulfill daily needs, and eventually, a destination to entice them to engage and self-actualize.

After examining a number of sites in Beirut, the site chosen for the investigation of this intensified multi-sensorial experience is in the area of El-Hosh-Syoufi leading to Al Mathaf district. The site is a node that connects Adliye, Furn El Chebak, Sin El Fil, Achrafieh, Ras En Nabaa, and Badaro. It has an area of 40,000 meters square of virgin land. The site is bounded on the northern side by Pierre El bGemayel Avenue overlooking Achrafieh. The avenue is a main artery that connects Beirut with surrounding neighborhoods. People working in Beirut use this artery on a daily basis as well as those who work in Mathaf area. On the opposite side, it is bounded by a minor road that separates the site from the Old Train Station which now houses military forces. This road is mainly used by inhabitants of Furn El Chebbak who wish to go to central Beirut or Achrafieh. It is also used by the farmers who own the agricultural lands towards the south-west.

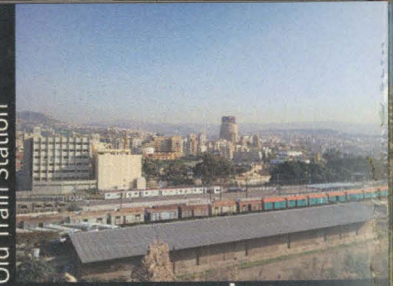
Pierre El Gemayel Avenue

Order of Pharmacy

VAT Building

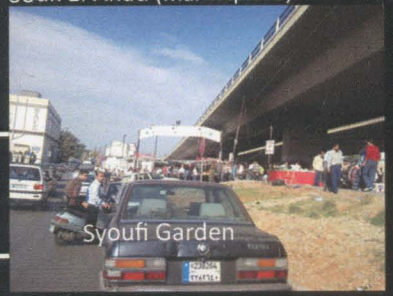
Syoufi Garden

Old Train Station



Zoning Diagram

Souk El Ahad (Marketplace)



Site

Residential/Commercial/Offices

Residential

Agricultural Land

Urban Landmarks

The proximity of the site houses major governmental facilities such as VAT building, General Directorate of the General Security, Ministry of Post and Telecommunications, Law courts and Ministry of Justice, Ministry of Industry and Oil, Ministry of Public Health, French Embassy, and the National Museum. There are also a number of private firms around Mathaf Square and the industrial zone of Sin El Fil. In addition to the working atmosphere, there exists the residential neighborhood of Archrafieh, Badaro, and Furn el Chebak. Hence, the site is already charged with this multi-facet urban fabric where sensory stimulation varies from one edge to the other.

The site is not to be isolated from the city but rather an extension of it. The project on such a site will aim to become part of the daily life of its inhabitants
a transitional space along their daily journey,
a place to fulfill daily needs,
eventually, a destination to entice them to engage and self-actualize.

Before the Lebanese Civil war, the site was rented to villagers from Kfar-romman, South Lebanon who used to farm the land. The farmers built their own houses, barns, and stables; eventually, the site was a smaller version of their homeland. During the war, the villagers went back to the south. Because the site is very close to the Green line, nothing on it survived the war. After the war was over, the property's owner decided to backfill the whole site. There are only two places in the site, today, where ruins from the farmers' houses can still be recognized.

Views from Site

The views from the site are mainly the skyline of Achrafieh and cityscape of Sin El Fil and Furn El Chebak with a mountainous background. Being at a higher level than the Old Train station, one can enjoy the view of the station's old trains, warehouses, and the remains of railway tracks.

Greenery is my mattress
and cityscape surronds me.

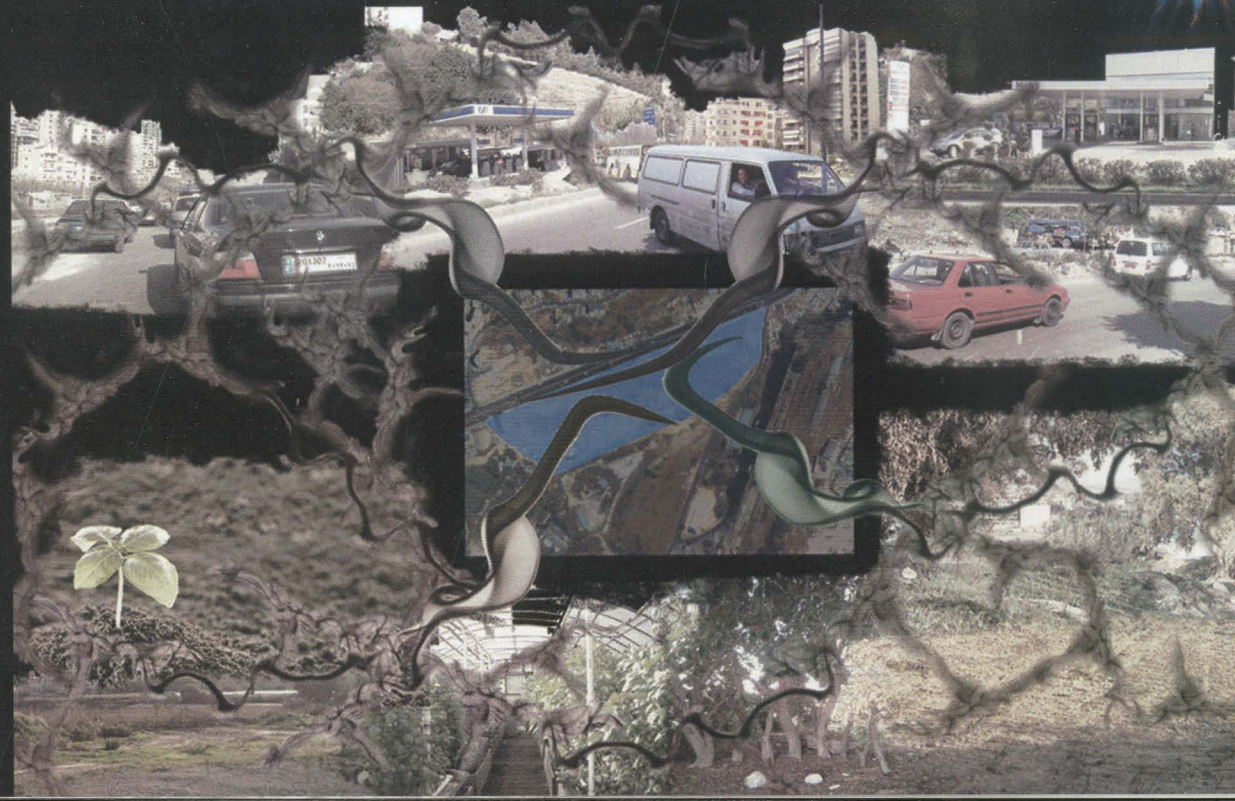
Panoramic of Site

Left, Sound Intensity Diagram
Right, Smells

In addition to the visual and haptic qualities of the site, fragrances and sounds vary across the site.

Moving from Pierre El Gemayel Avenue, the sounds of cars, buses, construction cranes, and car repair garages diminish gradually as one proceeds into the site. The hustle of the city is subtly replaced with the sound of the leaves crackling against the wind. The part next to the southern road is almost mute with the exception of few cars passing by every now and then.

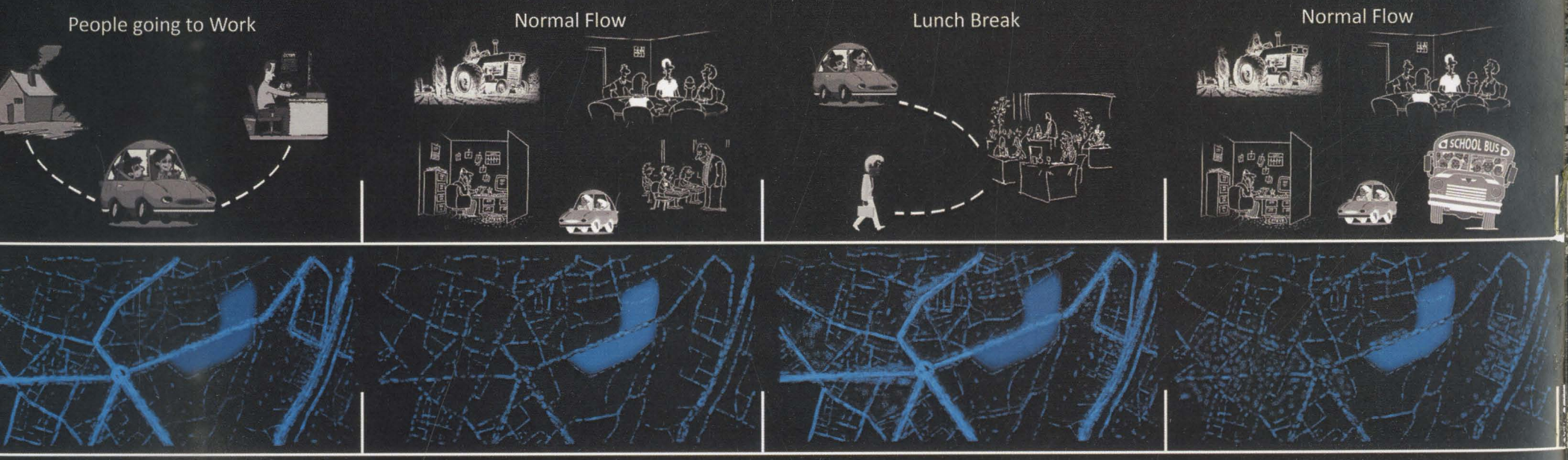
Next to the highway, smells of smoke, dust, and gasoline saturate one's breathe. Walking between the trees, the smell of earth fills the air. As the breeze blows from the south-west side, it carries with it a smell of fertilizers.



As mentioned before, the site was mainly chosen because of the immense flow of people around it. Since the project aims to slow these people down, it is important to study vehicular activity. There is already a notion of a flow pausing due to the presence of a number of gas stations and car repair garages that are on both sides of the avenue.

Traffic and Car Flow Diagram

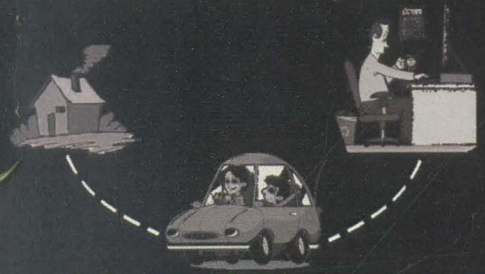

Mobil



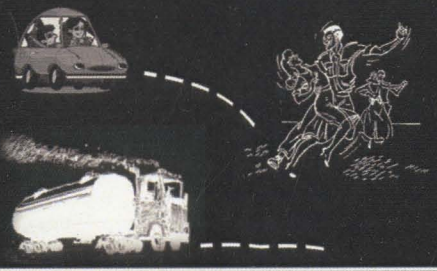
Activity and Flow

Journey-Transition-Destination-Place

People going back Home

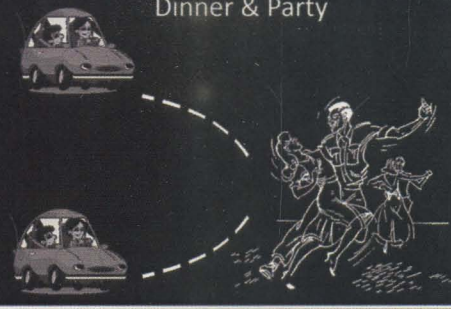


Dinner, Delivery Trucks



Residents' Activity & Souk El Ahad

Dinner & Party



5:00-7:00pm

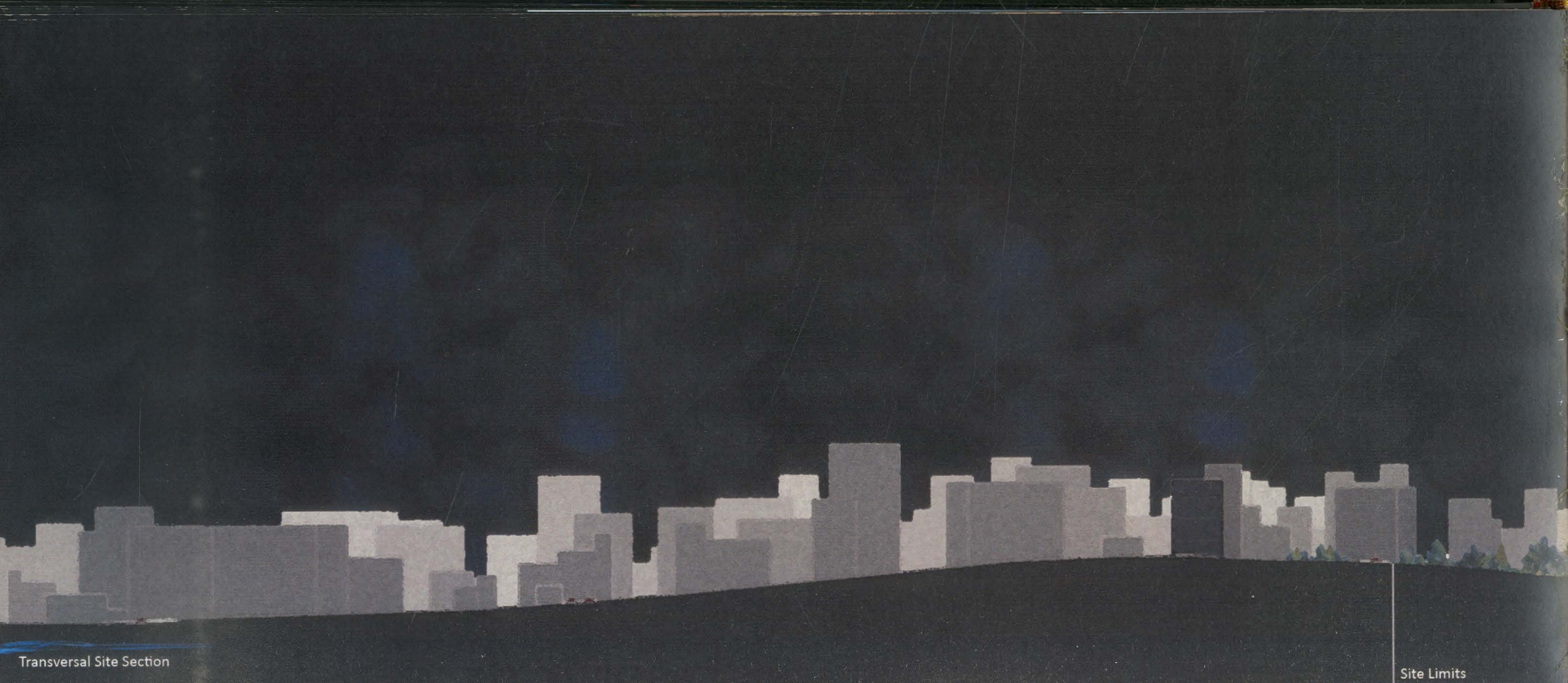
7:00-11:00pm

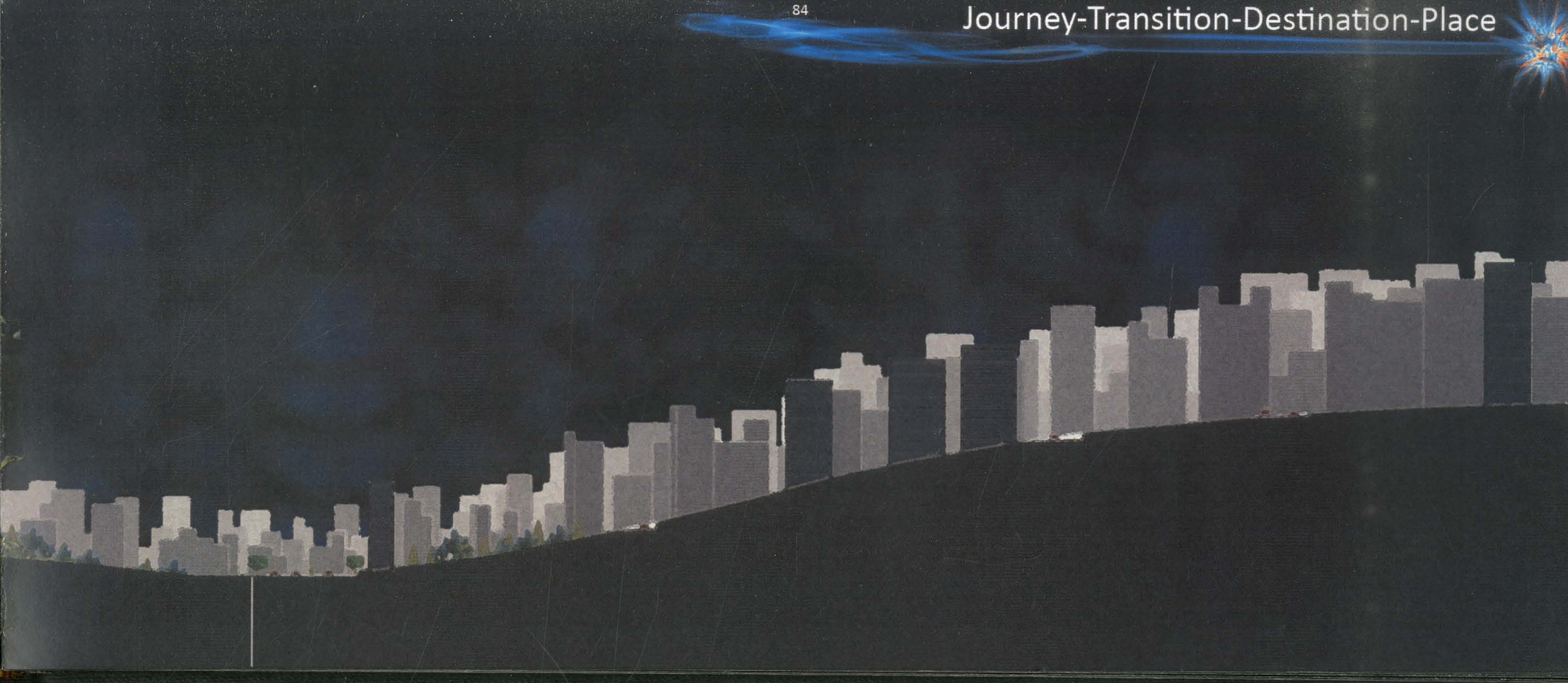
Weekday

Day

Nig

Weeken


Transversal Site Section
Site Limits



"How shall we appreciate our small part in the web if life on Earth? How shall we come to know one another deeply, compassionately, fullfillingly, unless we learn more of how the mind and senses work?"[1]

1. Ackerman, *A Natural Histroy of the Senses*, 1993. p.308

Corporeal Encounters

Corporeal encounters between human bodies flowing in the vicinity of the site and those who are already climbing up Maslow's hierarchy of needs will yield a human interaction that shall facilitate the whole process of self-actualization. Thus, the formulation of the program, user groups and actors are extremely interconnected. Corporeal Encounters will allow people to meet, share, and coexist.

Based on the previous site investigation, the thesis project will be designed to attract:

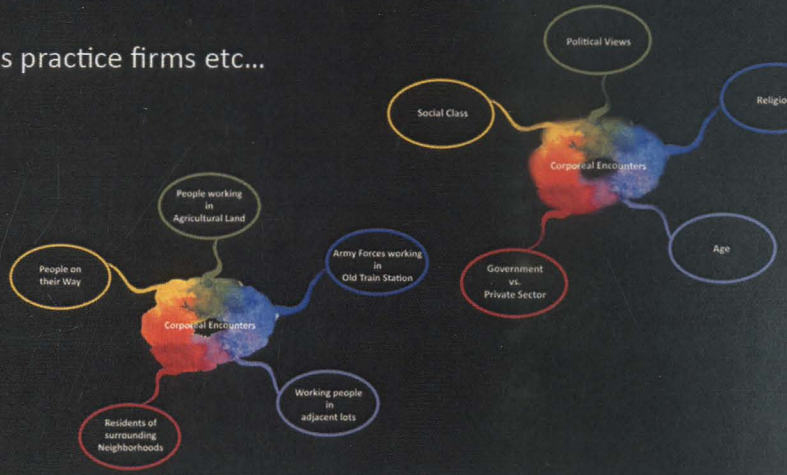
→ Users of Pierre El Gemayel Avenue as their route to go to their jobs in the morning; then back to their houses in the evening. These users are in particular:
Government personnel working in the governmental facilities mentioned above
Employees in the private sector such as Engineering firms, Contracting companies, Business practice firms etc...

→ Passersby using Pierre EL Gemayel Avenue, particularly:
Drivers of delivery vehicles
Vegetable sellers heading to Souk El Ahad during weekends

→ Unemployed female residents in the surrounding residential neighborhoods

→ Farmers who own the agricultural lands towards the south-west

→ Army forces occupying the military base to the west of Old Train Station.



Based on Maslow's study of persons, he devised a set of characteristics that depict self-actualized people. I shall highlight those that are more or less in line with my thesis methodology being sensory intensification.

The first quality of self-actualized people is that they have a "more efficient perception of reality and more comfortable relations with it." Ibraham Maslow elaborates by saying that self-actualized people are

> *"more aware of their environment, both human and nonhuman. They are not afraid of the unknown and can tolerate the doubt, certainty, and tentativeness accompanying the perception of the new and familiar."*[1]

Another characteristic is that self-actualized people are not hampered by convention, but they do not flout with it. "They are not conformists, but neither are they anti-conformists for the sake of being so. They are not externally motivated or even goal-directed; rather their motivation is the internal growth and development, the actualization of themselves and their potentialities."[1]

Self-actualized people have a need for privacy and a quality of detachment. "The self-actualizing person enjoys solitude and privacy. It is possible for him to remain unruffled and undisturbed by what upsets others. "[1]

1. Maslow & Lowry, *Dominance, Self-Esteem, Self Actualization*, 1973.

Moreover, they are the persons who deploy continued freshness of appreciation. "Self-actualized persons repeatedly, though not continuously, experience awe, and wonder in their everyday world."[1]

Finally, the most significant quality of self-actualized people is creativeness. All of Maslow's subjects were judged to be creative, each in his own way. The creativity involved here is not only a special-talent creativeness.

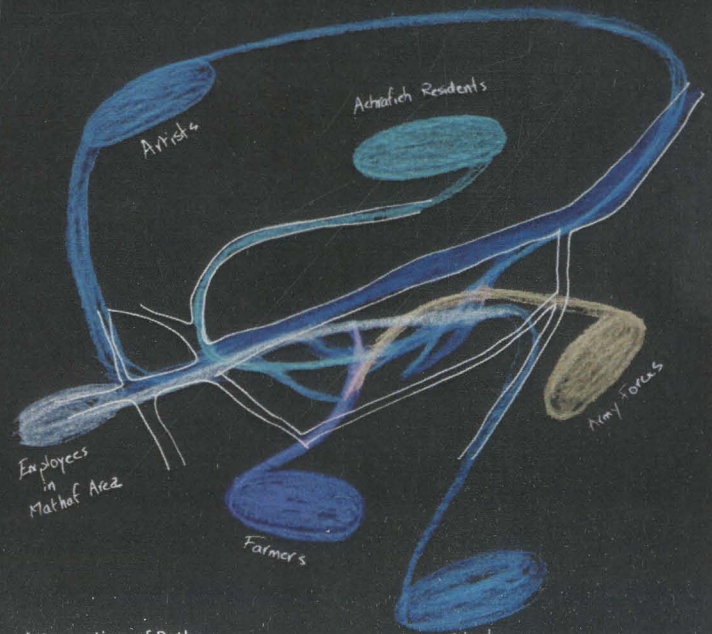
> *"It is a creativeness that is potentially inherent in everyone but usually suffocated by acculturation. It is a fresh, naïve, and direct way of looking at things. Creativeness is a characteristic, all cannot but agree to as being characterizing self-actualized persons."*[1]

Creativity nourishes our sensibility. Indulging in creative activities enhances our abilities to exploit our potential. When creating, a person cannot but be aware of the moment. However, living a fast paced life leaves no room for such activities. The rush that strikes us with a swiping motion has marginalized those activities.

"...the artists among us reach a higher state of awareness, from which they transcend our rigorous but routinely analyzing senses and become closer to the raw experience of nature that pours into the unconscious, the world of dreams, the source of myths."[1]

Ackerman's words portray those who are already on their way to self-actualization without stating it bluntly. Hence, the actors in the project shall be the artists. The work of artists depends significantly on their ability to engage their senses within their work in a creative manner. As Diane puts it; artists simply surpass the superficial capabilities of the senses. They exploit their corporeal potential due to their sensitivity to what surrounds them, due to their "higher state of awareness."

Consequently, the program is generally developed based on both the actors and the user groups. The first layer of the program involves activities that are part of the everyday life of the user groups. The second layer includes activities of energetic creative production.



Intersection of Paths

1. Ackerman, *A Natural History of the Senses*, 1993. p.306
2. Maslow & Lowry, *Dominance, Self-Esteem, Self Actualization*, 1973.

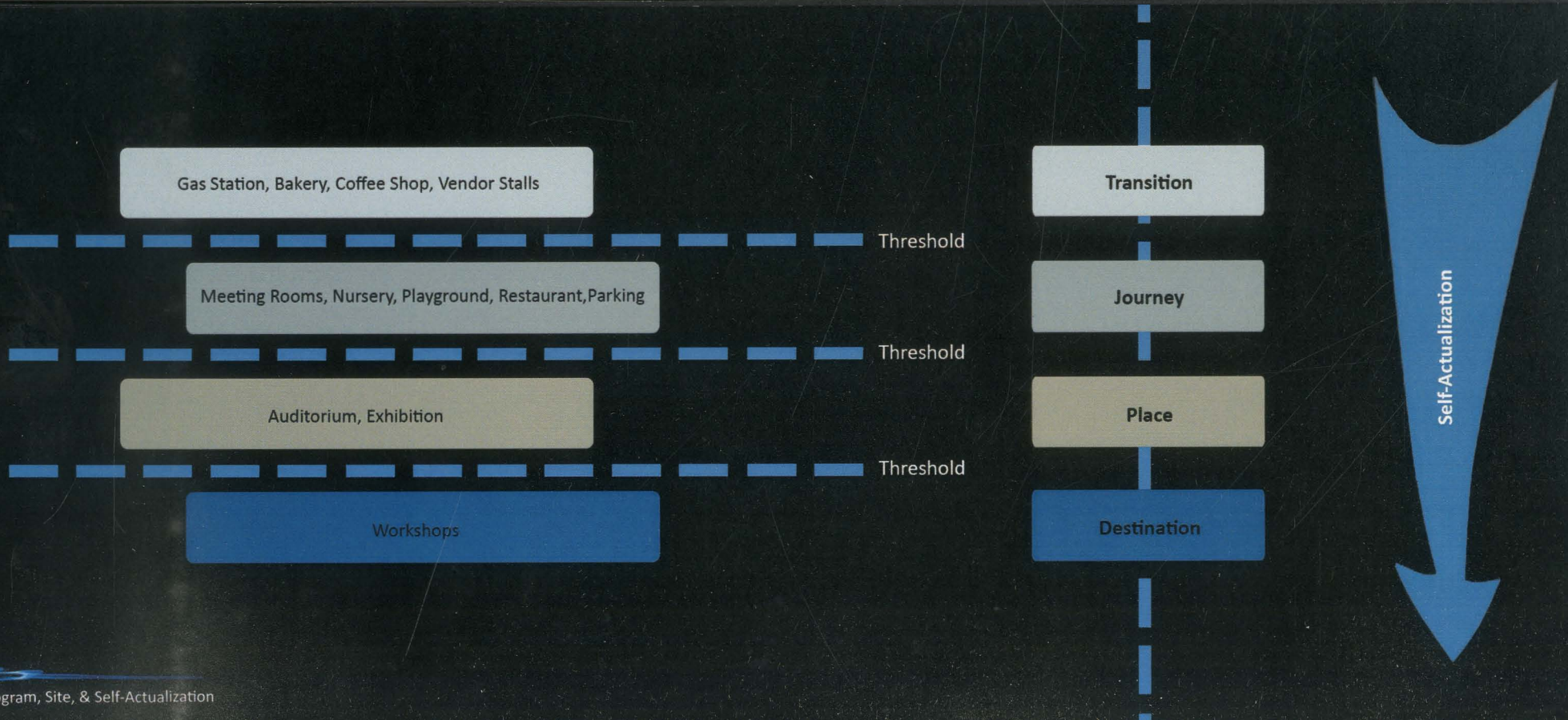
First layer of program: **Event or Daily Activity:**

- → Gas Station
- → Breakfast Snack (Bakery)
- → Café
- → Restaurant
- → Vendor Stalls:
  - Flower Shop
  - Vegetable Stands
  - Hand-made art Items (sculpture, ceramics, textiles etc..)
  - Home-made food
  - Hand-made Perfumes
- → Meeting rooms
- → Nursery
- → Auditorium
- → Bike Racks
- → Exhibition
- → Parking
- → Administration
- → Storage Space

Second layer of program: **School of Art-Workshops**-for:

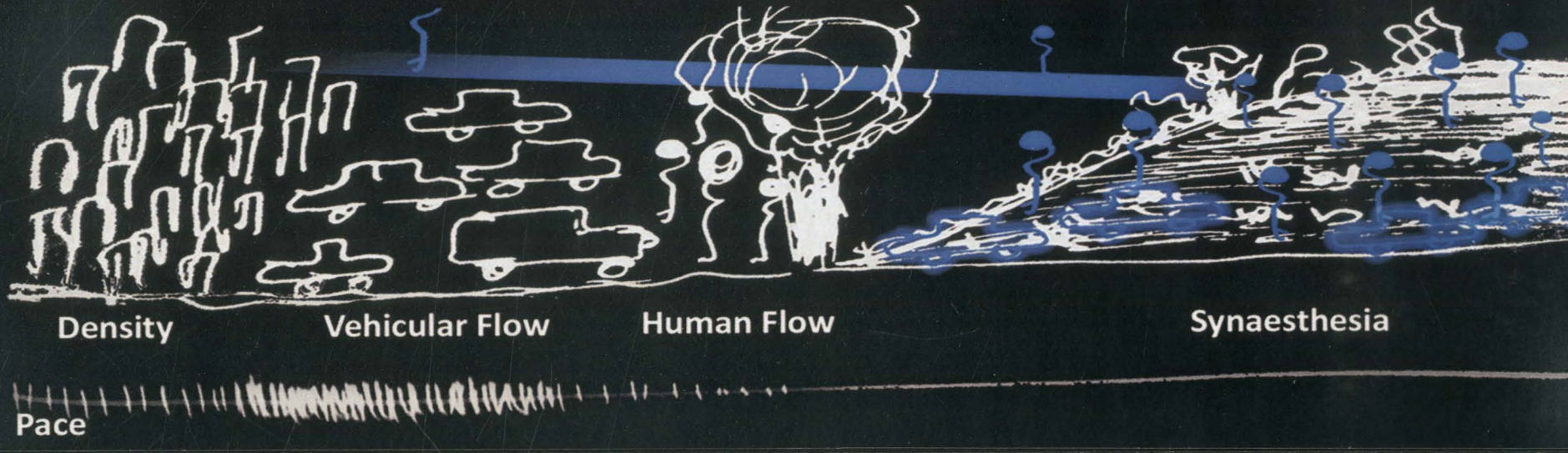
- → Painting
- → Pottery
- → Sculpture
- → Carpentry
- → Iron-work
- → Textile fabrication
- → Music
- → Culinary art (art of cooking)
- → Gardening
- → Perfume making
- → Dancing

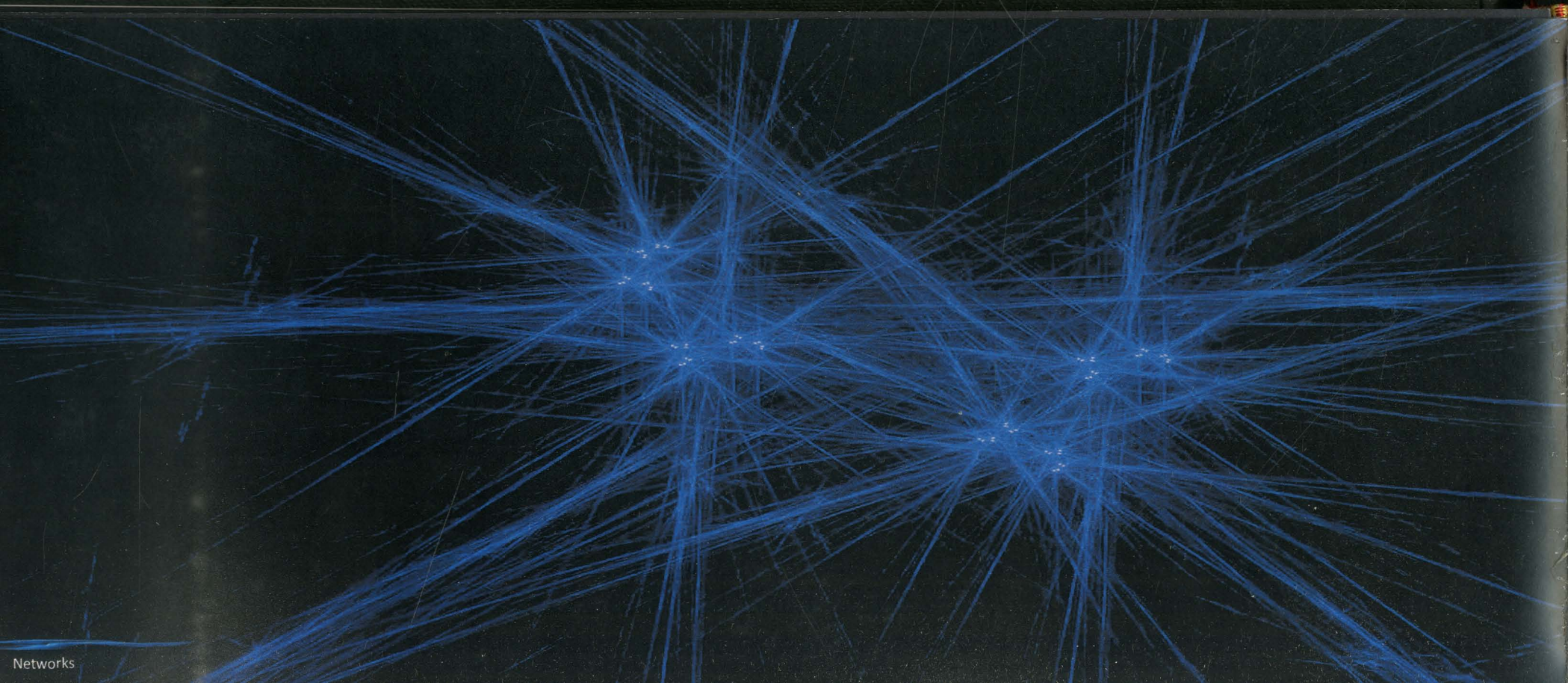
"Knowledge of unhappiness, the disposition to focus the ten senses of sight, hearing, taste, touch, smell, feeling, thought, consciousness, memory, and experience, upon happiness, is a part of the growth process which transforms unhappiness into satisfaction."[2]



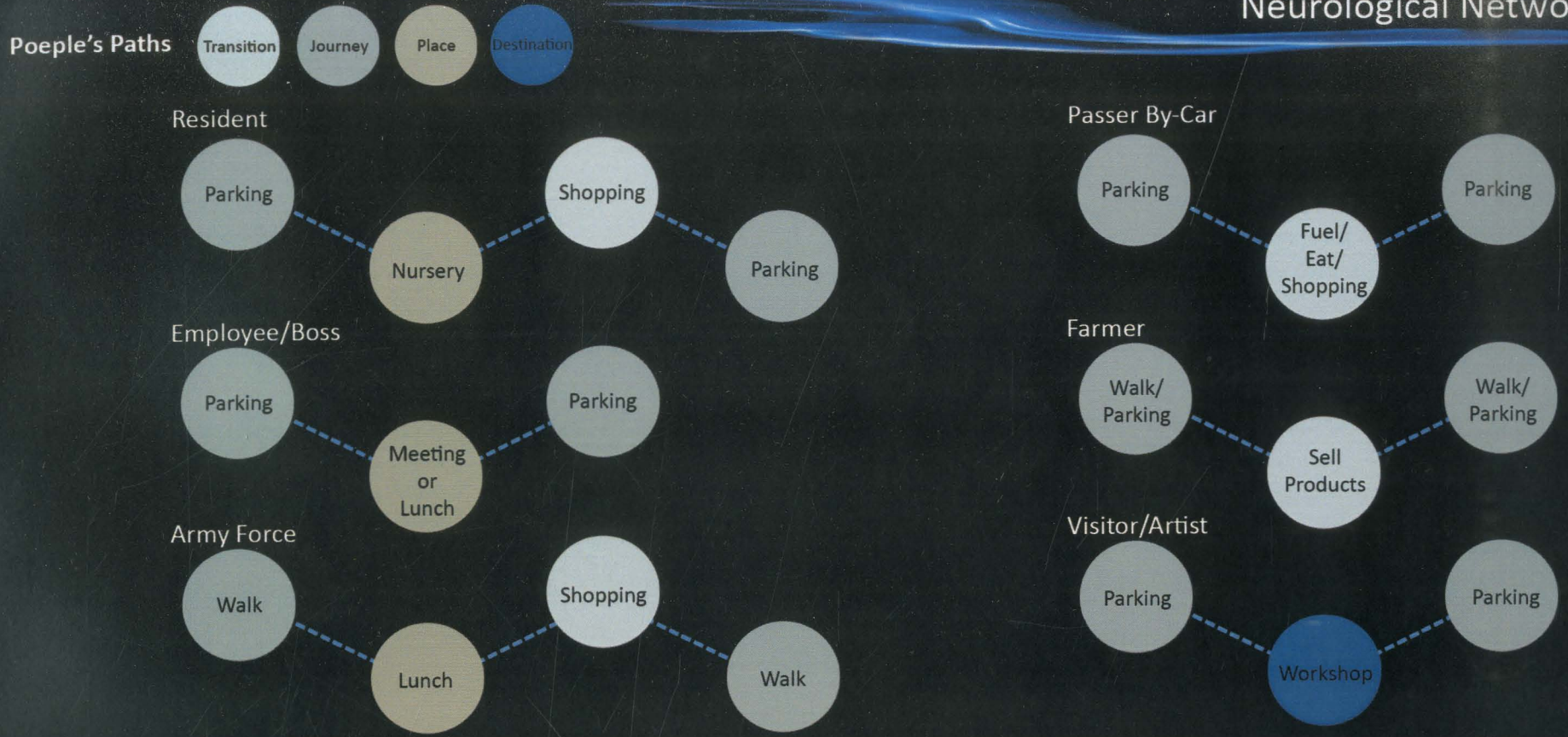
Program, Site, & Self-Actualization

Formulating the program on the basis of site needs and self-actualization led to a double-layered program. However, the relationship between the different elements of program, user groups, and actors is much more complicated. The program as a whole is conceived as multi-layered networks. These multi layers reflect the intricate relationships between the program elements and the general conception of the site as being a journey-transition-destination-place. Superimposing these relationships leads to a complex sensorial functional web of activities and encounters.



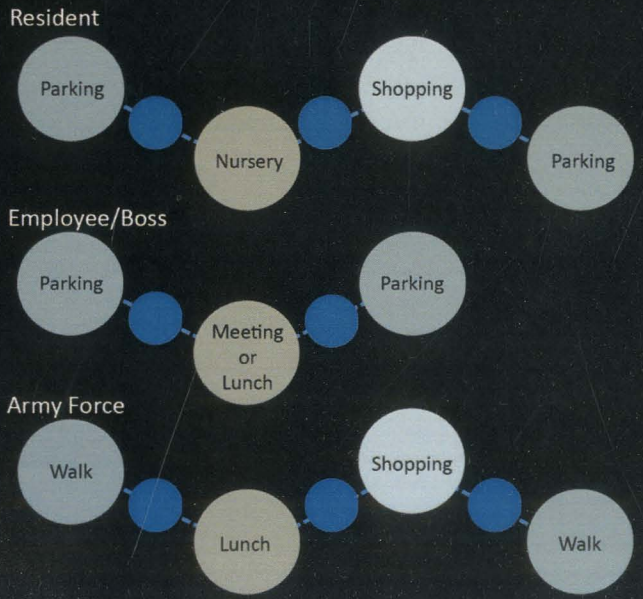

Networks

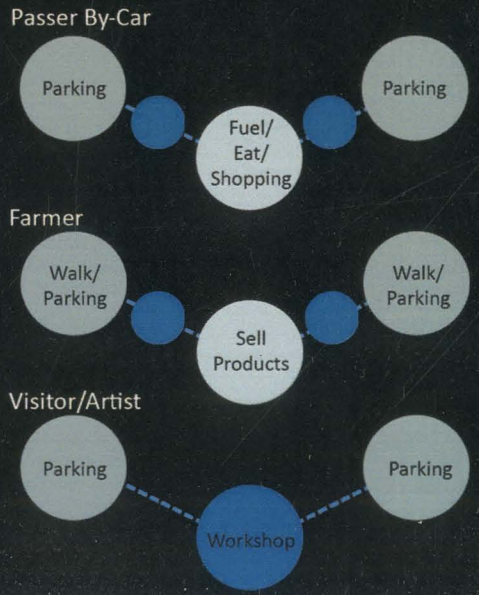
Neurological Networks



Network of Creative Activities-Self-Actualization

The diagram on left represents the paths people shall take to fulfill daily needs. The grid of self-actualization will be superimposed upon their paths to intersect their daily life. Consequently, creative activities will become part of their fast paced life.





Neurological Networks

First Network-Transition

Second Network-Journey, Place

Third Network-Workshops

Fourth Network-Exhibition

Program	Area m^2
Gas Station	250
Bakery	180
Coffee Shop	200
Vendor Stalls	200
Restaurant	300
Nursery	500
Meeting Rooms	250
Playground	550
Archiving Center	450
Administration & Information Desk	450
Auditorium	2500
Art Cinema	1500
Exhibition	3000

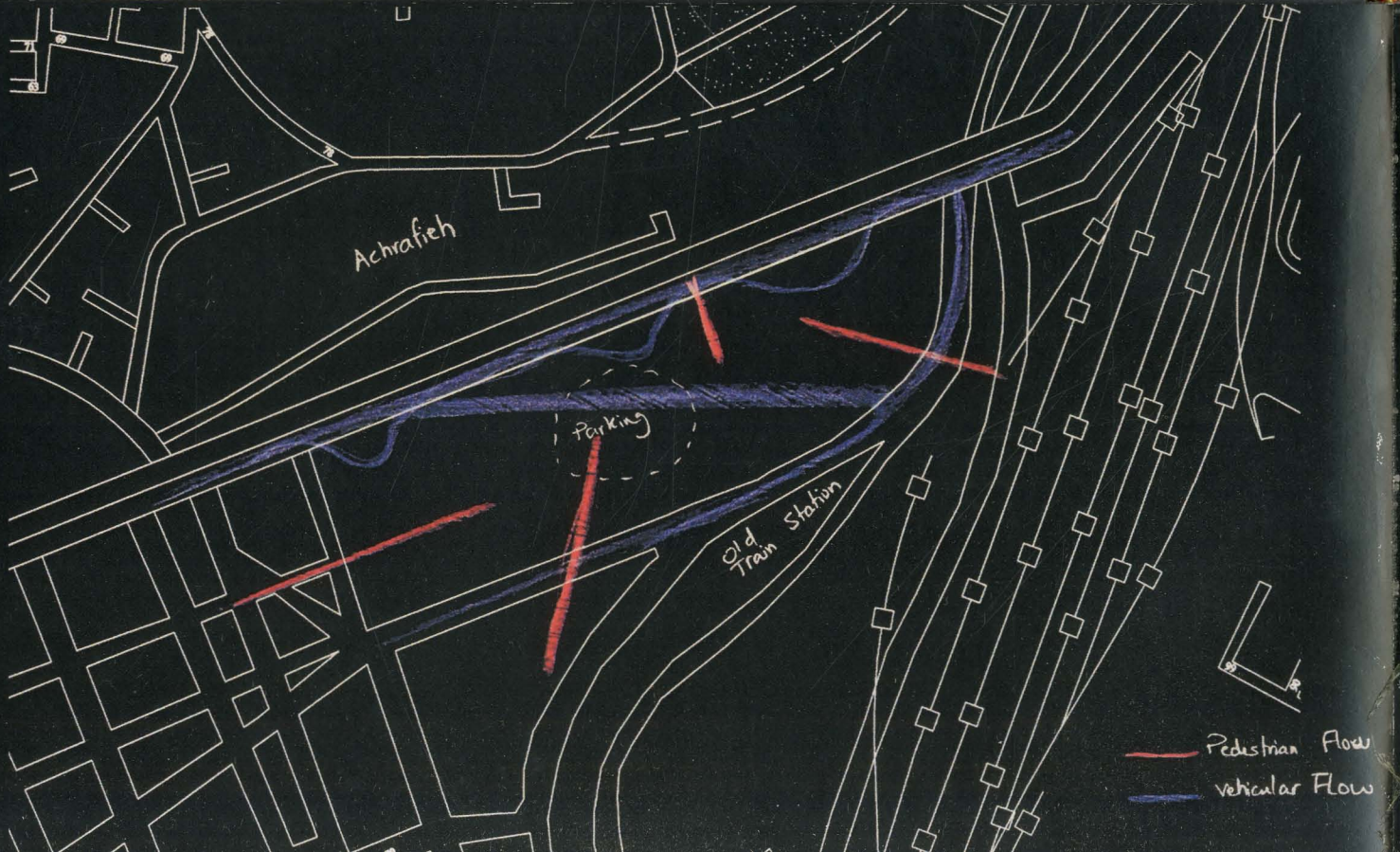
Program	Area m^2
Painting Workshop	75
Pottery Workshop	120
Sculpture Workshop	120
Carpentry Workshop	200
Steel Workshop	200
Textile Workshop	200
Music Workshop	150
Culinary Workshop (Cooking)	100
Gardening Workshop	150
Perfume Making Workshop	100
Dancing Workshop	75

Program Area Tabulation

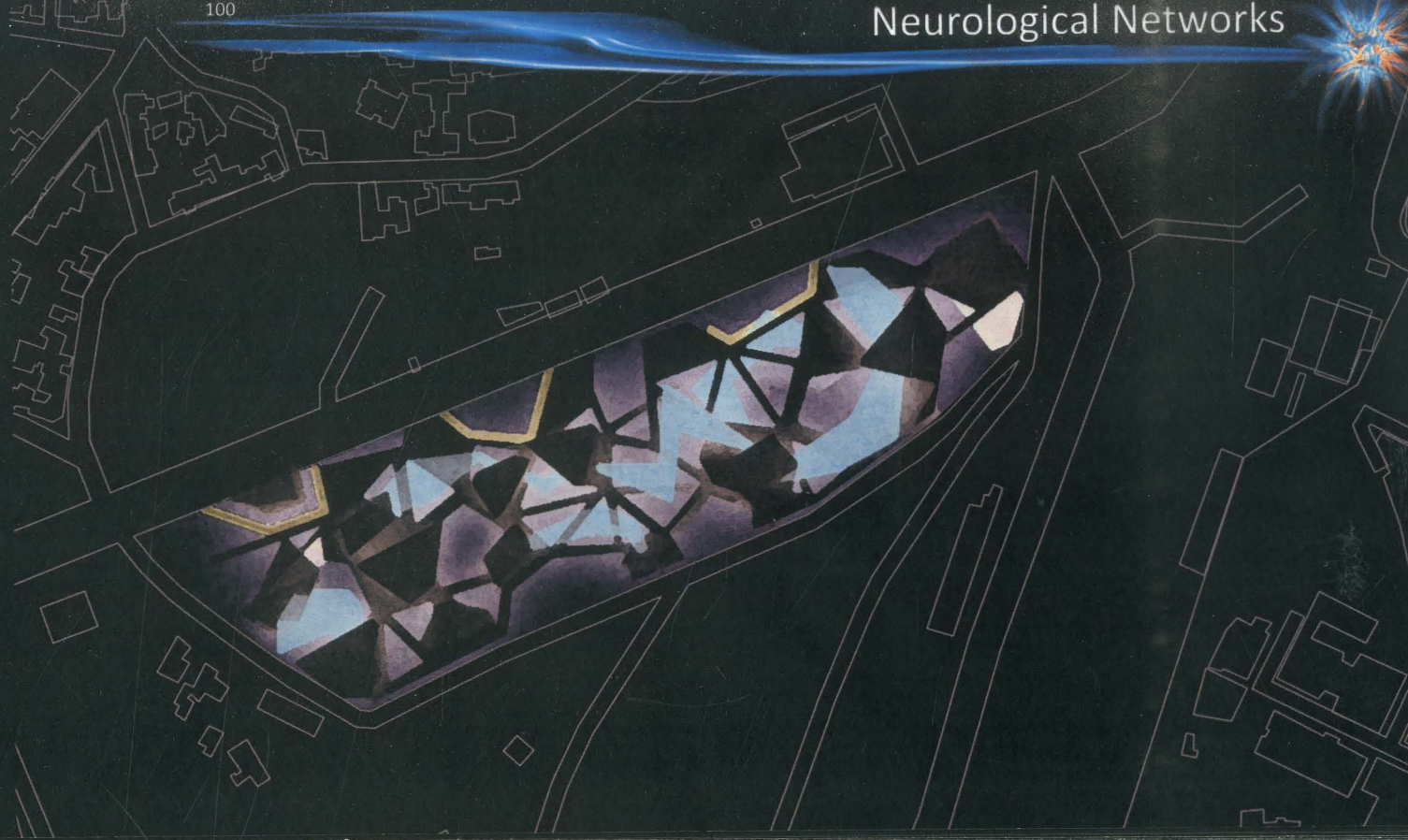
Neurological Networks

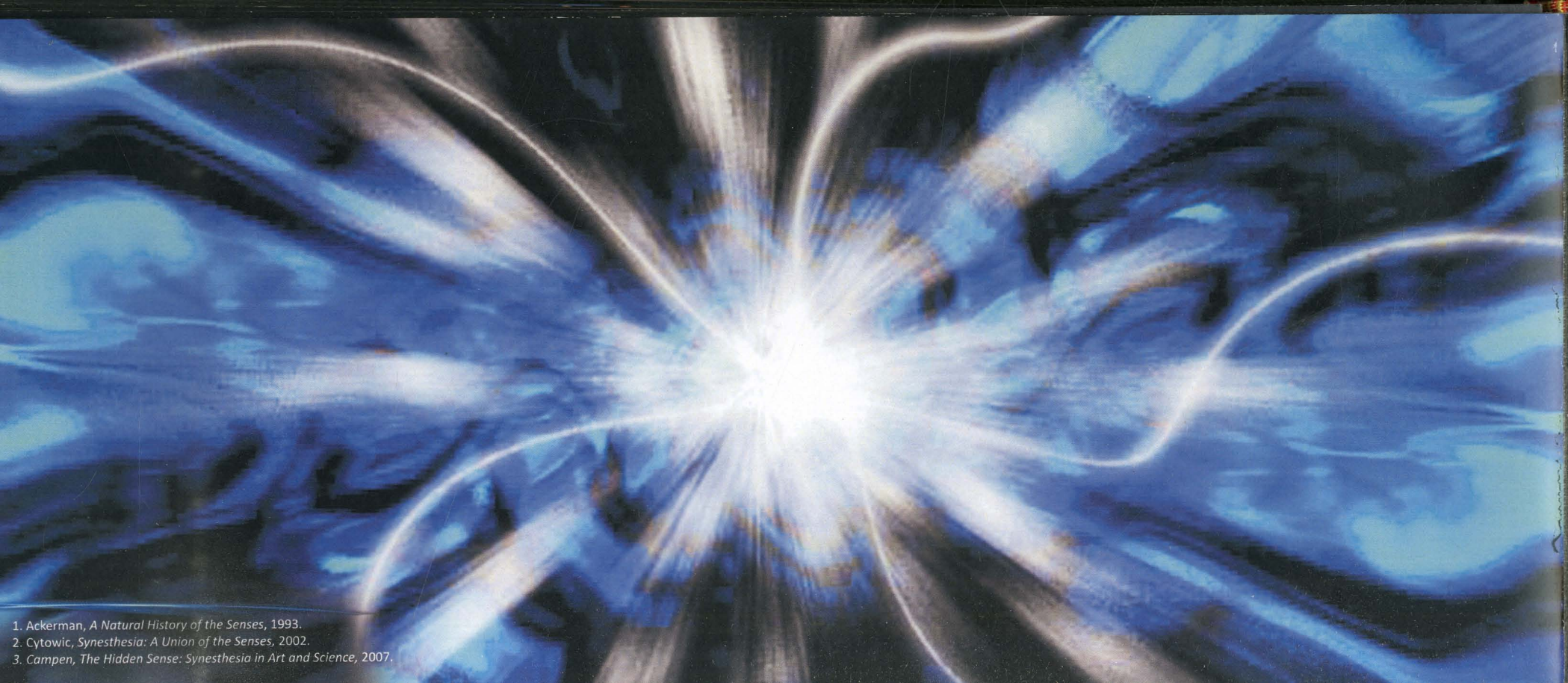
Program Adjancies & Links

After analyzing people's paths in relation to transition-journey-place-destination, the program is grounded on site in relation to context and flow. The different links between the program networks represent the journey from one activity to another. The program parts that are transitional are conceived as portals to the project. Their design would stimulate and intrigue the user to discover what comes ahead.



Access & Flow Diagram





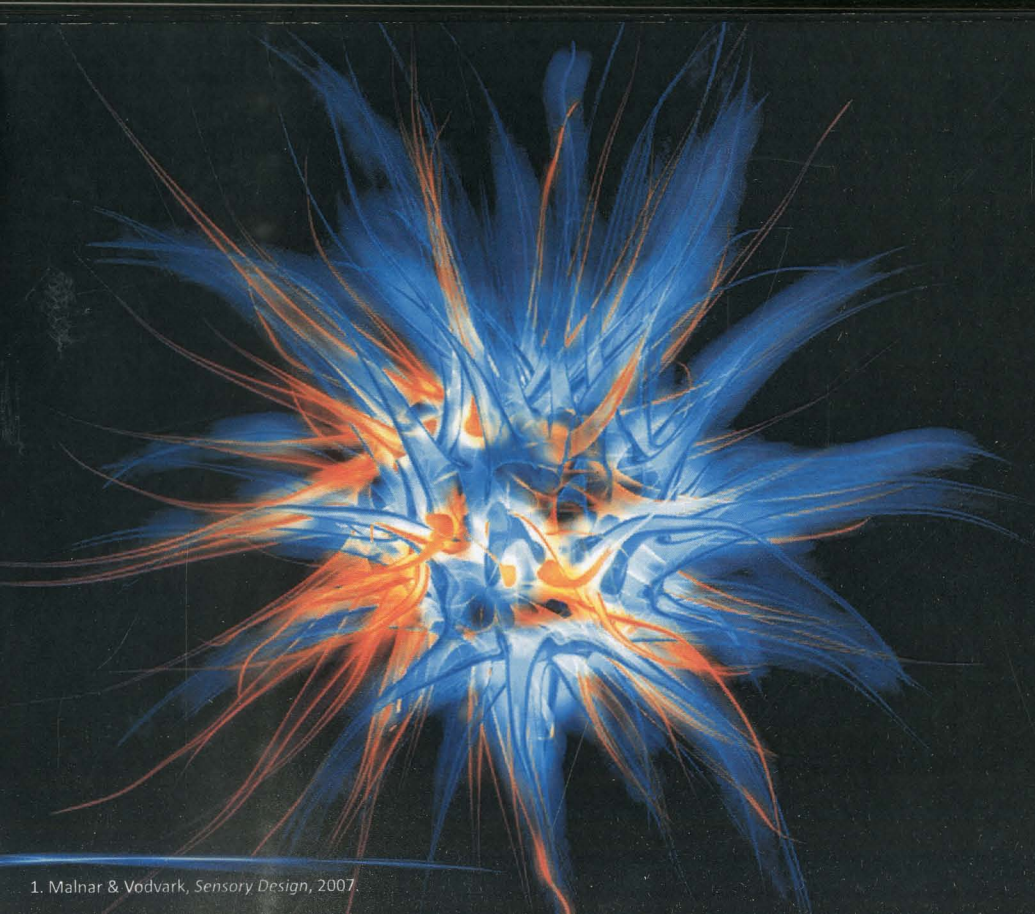
1. Ackerman, *A Natural History of the Senses*, 1993.
2. Cytowic, *Synesthesia: A Union of the Senses*, 2002.
3. Campen, *The Hidden Sense: Synesthesia in Art and Science*, 2007.

Synaesthesia is a truly fascinating condition. In its simplest form, it is best described as a "union of the senses" whereby two or more of the five senses that are normally experienced separately are involuntarily and automatically joined together. Some synaesthetes experience color when they hear sounds or read words. Others experience tastes, smells, shapes or touches in almost any combination. These sensations are automatic and cannot be turned on or off. I conceive of it as Maslow's "peak experiences."[2]

Synaesthesia is a phenomenon present in discussions about sensory experiences, environmental psychology, philosophy of perception and art. Aristotle believed it to be a device connecting all the senses, which later on was developed by others into what we know as a 'sensus communis.'[3]

Art historian, Ernst Gombrich, defines synaesthesia as, " the splashing over of impressions from one sense modality to another."[2] The choice of words is interesting. "Splashing" seems to refer to a quite casual act, slightly artistic and not very precise. The word "impression" is indicative of Gombrich seeing perception as a subjective act. Referring to the senses as "modalities" implies a separation of the senses, however connected by synaesthesia. The project, given the chosen site, is a mattress for multi-sensorial experiences. It is a place to visit on a daily basis and be a synaesthete.

"A thick garment of perception woven thread by overlapping thread"[1]



Slow Down

Engage your Senses

Be Creative

Be Aware

Self-Actualize

1. Malnar & Vodvark, *Sensory Design*, 2007.

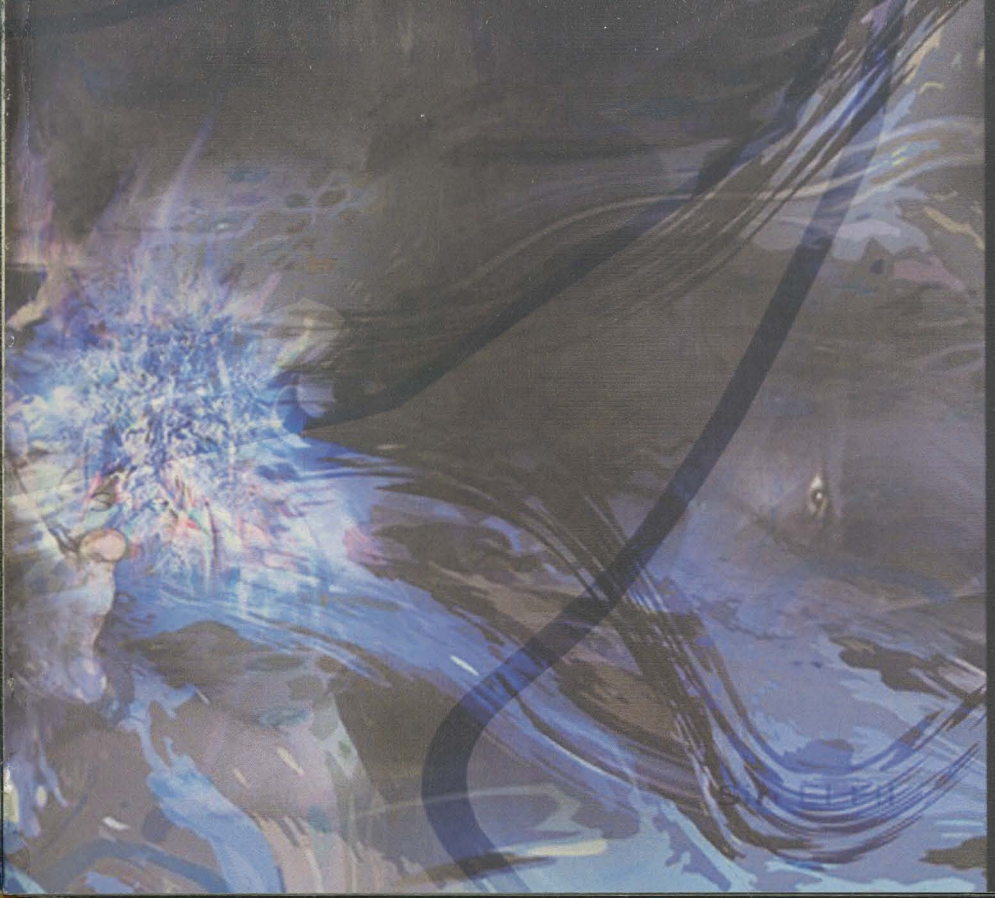
In their book, Malnar and Vodvarka state that, "collectively such experiences are referred to as synaesthesia, the involuntary physical experience of a cross-modal association."[1] One noteworthy word here is "involuntary" which implies that there is no choice but to make these associations when having an experience. The objective is then that as people are carrying on with their daily needs, they cannot but be stimulated synaesthetically. The other interesting difference with previous definitions is the addition of the specification "physical" to the experience. However, as I understand it, this physical aspect is not to be understood as bodily in the senses of the muscles, but rather as internal stimuli.

> *"...the stimulation of one sensory modality reliably causes an involuntary perception in another modality. Such percepts are, moreover, durable, discrete, stable, and memorable."*[1]

Here the involuntary is stressed again, but along with revealing the positive sides of it. Self-actualization requires the continuous stimulation and awareness of all the senses, thus the implication of the notion of synaesthesia.

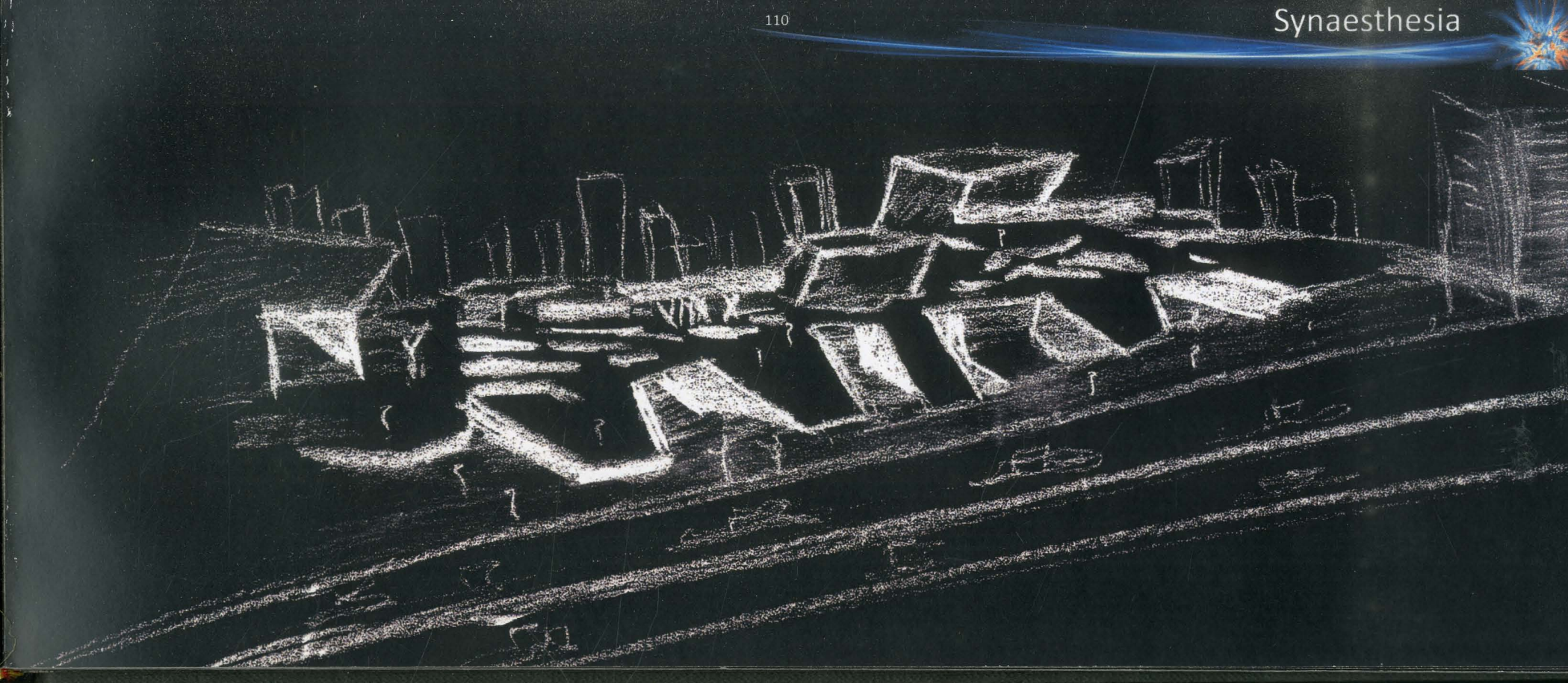
What becomes more significant is the totality of the sensorial perception rather than the act of hearing, smells, touching... The thesis is entitled, "Synaesthesia: Corporeal Encounters," with the aim of creating this union of sensory perceptions through intensified sensory stimulation towards self-actualization of individuals. The synaesthetic effect shall be embedded within the design itself and by uniting the sensorial experiences of various people. The project in line with the site aims to create a synaesthetic experience amidst the urban hustle of the city of Beirut. I conclude with synaesthesia since it is the guiding experience of the corporeal encounters that shall happen in the project. Synaesthesia becomes an integral part to life giving a sustainable meaning to experience; hence, the process of self-actualization.

Synaesthesia on Site



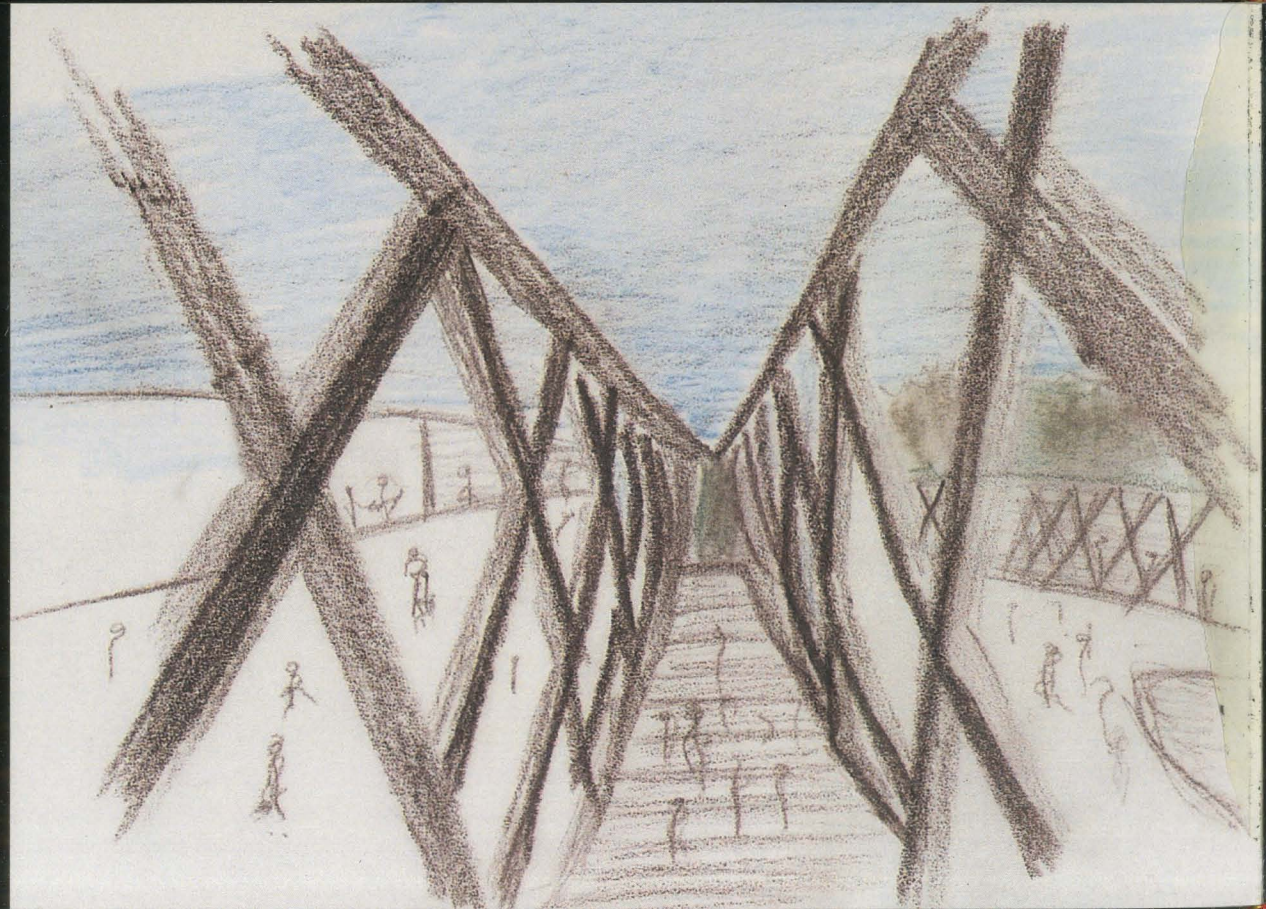
Sectional Vision

Envisioning




Juxtaposition of Networks

As I stood in the entry, my mind became quiet.
I felt the damp stone,
I saw a strong contrast of light, which revealed texture,
I smelled the earth,
I heard the sound of a waterfall and I felt the constricted spatial enclosure.



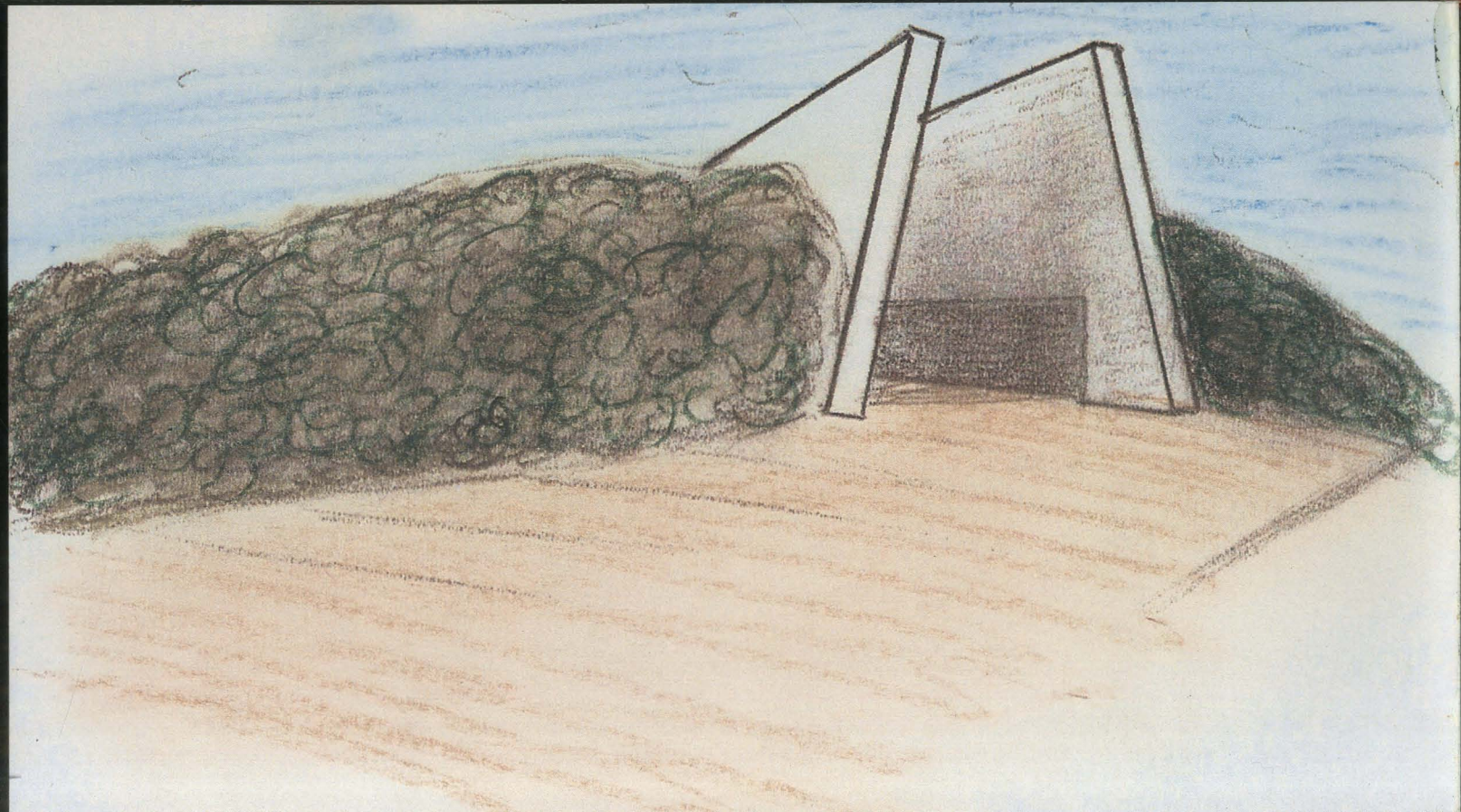
Envisioning

As I continue to walk, the sky becomes the ceiling and the sensation of a rough, uneven surface runs under my feet.
A distant sound of water asserts its presence with each step.
I walk forward through the alternating volumes of light and sound as I see soft light framing the landscape.

My path is framed by nature.
I smell earth
Textures of wood lead my way

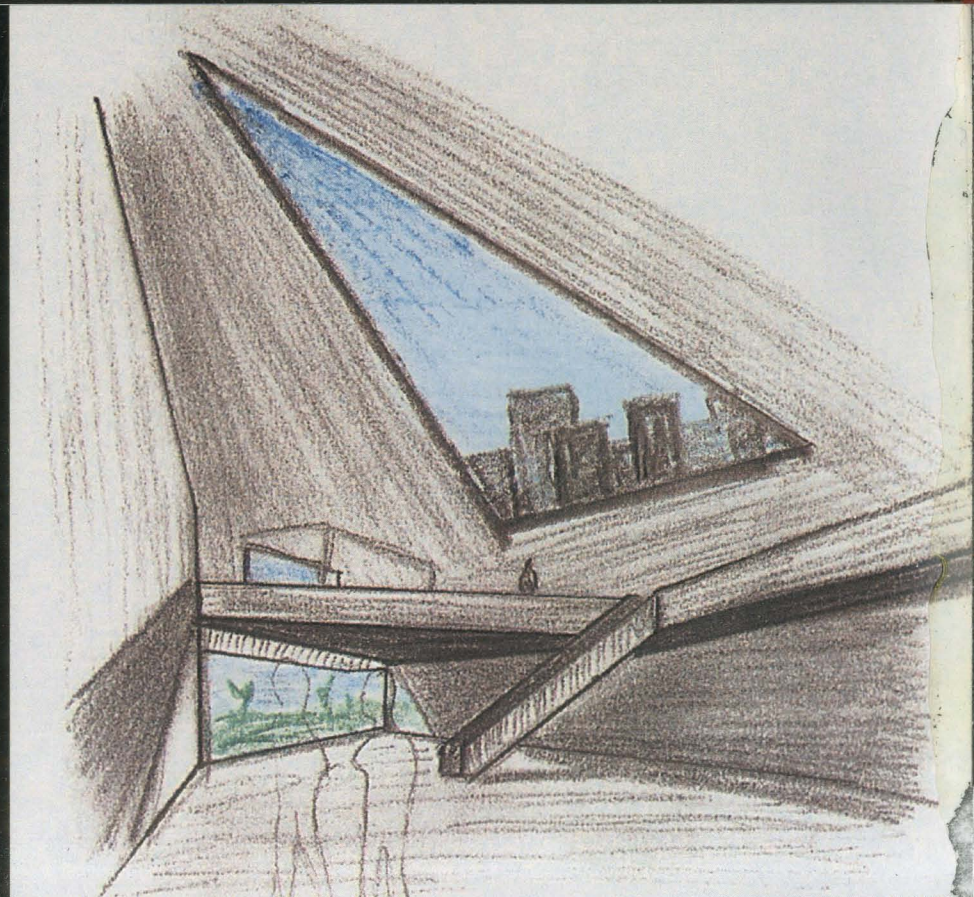
Envisioning

My steps are returned back to my ear from the large rough wall.
I can hear the water from both sides.
As I walk, I see a dark cave within the stone wall. I enter through the widest opening.
The light spills to the floor where it shimmers from a small collection of moisture.
Its presence makes me feel the chill.



Envisioning

A cut in Nature
A portal
I escape the highway
I enter



Envisioning

Glimpses of light is all I can see,
Humidity is all I can feel,
Must is all I can smell,
Harmonious notes played by water & wind is all I can hear...

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