SPATIAL INTENSITY

Master's Thesis in Architecture

SPATIAL INTENSITY:

What Constitutes Experiential Space and How We Perceive It

Supervisor
Prof. Simo Paavilainen, Architect, SAFA

Advisor
Aija Staffans, Dr.Sc. (Tech), Architect, SAFA
Helena Teräväinen, Dr.SC. (Tech), Architect, SAFA

Basics and Theory of Architecture
Department of Architecture
Helsinki University of Technology
26 August 2008

Arvi Mäkitalo
524 65H

Abstract

In this thesis, I explore how architecture and urbanism give form to lived, open-ended narratives through an excavation of history, falsification, and invention of new stories. I argue that all architecture, old and new, stems from, and is a commentary on a specific cultural past and present, and that it is the reinterpretation of these memories that lends to architecture its intrinsic meaning. This text is therefore an argument in favor of a recognization of the dormant artistic potential within the temporal layers of sedimented history that are both menacing and enabling.

First, I examine the ways in which meaning, in the form of cultural and personal memory, two things that are deeply bound to each other, can be coded into things, objects, of any kind, in a way that is inseparable from their materiality. This meaning is not symbolic, but embodied. Spatial designers have the opportunity of cultivating their affinity for finding these dormant memories, and, as *bricoleurs*, of making new memories and fresh narratives of them. By doing this, they allow forgotten pasts to bleed their embodied meanings into a new cultural environment, that of the *now*, an often very different one from that of *then*, i.e. when a specific meaning became incorporated into the space.

The intrinsic materiality of space is not restricted to physical environments, but extends to the virtual, thus opening up an optional way of thinking of augmented reality than the purely functional or the transcendental. I argue that the materiality of the virtual is no mere simulacrum or figment, but a real and tangible one, as real in the moment of experiencing as any other, and that it is from this angle that their use in spatial design should be approached and evaluated.

The second part of my thesis is an exploration of the multisensory and synaesthetic ways in which the experiencing of materiality takes place. The materiality of objects and spaces is experienced mainly through the near senses of touch and smell, but I also present the concept of *haptic visuality* borrowed from Laura U. Marks' theory of intercultural cinema, a caressing look that flits across the surface of things. All these senses and the different ways in which they are employed come together in a shifting, morphing

and interconnected way to form the human sensorium; culturally informed, but unique to each individual.

The foremost aim of my thesis is to heighten the understanding of the great number of mechanisms that come together to constitute spatial experience. In doing so, it may be possible to enlarge the repertoire of methods available to architects and urban designers, allowing for expressing some things that may now seem inordinately complex or even totally inexpressible.

Abstrakti

Diplomityössäni tutkin niitä tapoja, joilla arkkitehtuuri ja kaupunkisuunnittelu antavat muodon eletyille, muodoltaan avoimille narratiiveille historian tulkinnan, sen kyseenalaistamisen ja uusien tarinoiden luomisen avulla. Pyrin osoittamaan, että kaikki arkkitehtuuri, sekä uusi että vanha, kasvaa kulttuurisesta kontekstista ja omalta osaltaan on myös mukana muodostamassa sen kritiikkiä. Näiden kontekstuaalisten muistojen uudelleentulkinnan kautta arkkitehtoninen tila saavuttaa sille ominaisen merkityksellisyyden. Tekstini on puheenvuoro tilojen sedimentoituneiden historiallisten kerrosten nukkuvan, ajoittain uhkaavan mutta samalla mahdollistavan taiteellisen potentiaalin puolesta.

Ensimmäisessä osassa tutkin kuinka merkityksiä, kulttuurisen ja henkilökohtaisen muistin muodossa, voidaan kirjata esineisiin tavalla, joka on kiinteästi yhteydessä esineen materiaalisuuteen. Nämä esineet eivät symboloi merkityksiä, vaan ruumiillistavat ne. Tilasuunnittelijoilla on mahdollisuus kehittää näiden uinuvien merkityksien tunnistamisherkkyyttään ja, kuten *bricoleurit*, koota niistä kollaasin avulla uusia merkityksiä ja tuoreita narratiiveja. Näin menneisyyden unohdetut tilat ja esineet saavat mahdollisuuden vuotaa toisesta ajasta nousevat muistonsa uuteen ja niille vieraaseen kulttuuriympäristöön.

Tilojen ehdoton materiaalisuus ei rajoitu vain fyysisiin ympäristöihin. Se ulottuu myös virtuaalisiin tiloihin, avaten uusia tapoja suhtautua lisättyyn todellisuuteen puhtaan toiminnallisen ja yliaistillisen rinnalle. Tulen väittämään, että virtuaalisen materiaalisuus ei ole simuloitua tai illusorista vaan todellista ja käsin kosketeltavaa, yhtä todellista hetkessä koettuna kuin mikä tahansa muukin. Niiden arviointia ja käyttöä tulisi lähestyä ja tarkastella juuri tästä näkökulmasta.

Toinen osa käsittelee niitä multisensorisia ja synesteettisiä tapoja, joilla materiaalisuus koetaan. Se tapahtuu enimmäkseen niin sanottujen lähiaistien, kuten haju- ja näköaistin kautta, mutta oman lisänsä kokonaisuuteen tuo Laura U. Marksin elokuvateoriasta lainattu haptisen visuaalisuuden, eräänlaisen silmillä koskettamisen käsite. Nämä aistit sekä tavat, joilla niitä käytetään, muodostavat sensoriumin, ihmisen aistien kokonai-

suuden, joka on sidoksissa kulttuuriin mutta samalla jokaiselle yksilöllinen.

Diplomityöni päämääränä on lisätä ymmärrystä siitä suuresta määrästä mekanismeja, jotka yhdessä muodostavat tilakokemuksen. Tällöin on ehkä mahdollista laajentaa arkkitehtien ja kaupunkisuunnittelijoiden käytössä olevien ilmaisutapojen kirjoa kattamaan asioita, jotka nyt vaikuttavat erityisen hankalilta tai jopa mahdottomilta ilmaista.

Contents

Introduction

Introduction

"Creation, to me, is to try to orchestrate the universe to understand what surrounds us. Even if, to accomplish that, we use all sorts of stratagems which in the end prove completely incapable of staving off chaos." (Peter Greenaway)

The architecture of today can largely be read and understood through an acknowledgment of the visual-representational bias present in modern western culture. The dominance of the gazing eye over all other senses has passed beyond liberating thought with the help of abstract representation, and directly into impoverishing and restricting experiential variance in architecture. An essential sameness permeates much of our daily environments; they lack texture and detail, the rhythm of compression and expansion, lighting is almost uniformly bland, and micro-climatic differences have been harshly eliminated. This bias is by no means the only contributing factor, but it does play its part. Unimaginative design, short-sighted economical or functional optimization, lack of artistic ambition and many other causes also contribute. Our surroundings turn dull and tiresome, and we have become somewhat numb as a consequence.

Since the early 1970s, architecture has sought to define spatial meanings through other arts, the applied sciences, and several branches of philosophy. In a sense it is a very natural way to approach the problem, since architecture and urbanism themselves exist at the nexus of many arts and sciences, such as literature, cinema and music, sociology, psychology, engineering of many different stripes. The list is practically endless. Architecture is the setting for the entire gamut of human experience, and no less colorful. This limitless eclecticism is both a boon and a burden for architectural theory. Space is never quite one thing or the other, always formed in a barrage of competing motivations. As Juhani Pallasmaa writes in his book "The Architecture of Image": "This frantic interest in expanding the scope of architectural thought clearly indicates that the art of architecture has become uncertain of its essence and future course" (2001, 13). And yet, the theoretical currents of architecture and urbanism (postmodernism, phenomenology, and deconstructivism), have never completely bridged the gap

between meaning and expression. The dominant attitude appears to have been: from theory to application, no translation required. A borrowing of form from another discipline has usually been followed by an attempt to apply it to spatial design as is, resulting in playful fads, and baffling oddities such as "folding" architecture.

In my thesis, I approach the problem of the emotional intensity of experienced space in an equally eclectic and multidisciplinary fashion. The disciplines that have had the greatest influence on the final form of this text are film theory, art history, phenomenology with its concept of embodied spectatorship, and cognitive science. Of course, there is a great deal of overlap within these somewhat artificial categories themselves. From within film theory itself, I have drawn freely from two rich sources: Laura U. Marks' work on *haptic visuality*, a way of looking that is akin to touch, and the fantastical yet rigorous cinema theory of Gilles Deleuze. In its open-endedness and multiplicity of concepts, Deleuze's work is, despite its origins in film, equally suited to an analysis of true spatial experience.

From Deleuze's time-image cinema, and its grounding in Bergsons theory of memory embodied in the senses, Marks develops a discussion of the multisensory quality of film. I appropriate this cinematic theory in an effort to illuminate the synaesthetic and corporeal way in which architectural and urbanistic space incorporates meaning, and the mechanisms by which it conveys that meaning to the human body.

The films, photographs and installations of the artists presented within this text are, in essence, theoretical works in and of themselves, commentaries on narratives and embodied experience. They are not waiting for an approaching critic to make theory of them, but rather are themselves stand-alone, theoretical, contemplative pieces, and are treated as such in the text. They are sophisticated arguments on how different media can represent embodied experience, and why they should do so. The multisensory image is treated not as a translating medium, but rather as connective tissue, relating to one's body an irreducible experience. "No need to interpret, only to unfold, to increase the surface area of experience" (Marks, 2002, xi)

To understand these images as embodied, one must also insist upon their materiality. By understanding space as material,

one is confronted by its temporary and changing nature, including its eventual destruction. There is something beguiling and seductive about touching the skin of an image, and in knowing it in a different, more intimate way than by looking. Not seeing the totality of it, but feeling the effect, the surface. Through materiality, one draws attention to those aspects of a space that escape symbolic recognition. If an object is irreducibly material, as I shall argue, then it is also unique. Things, moments, and people pass, and can never be duplicated. The close corollary of materialism, then, is cherishing. The argument that will be presented for haptic space should not be seen as an alternative to the optical in the sense of supplanting it, but as an addition to it. My thesis is an attempt to flesh out a flow between the haptic and the optical that I believe to be lacking in contemporary culture. By doing this, it may be possible to cultivate an affinity to a more subtle and varied approach to designing and experiencing space.

Architecture and urbanism, in a more concrete and unmediated way than most other arts, are characterized by the long spans of time that they bear witness to. In a sense, all space exists in several different places and cultural environments; those of *then*, the time of original construction and the intervening years, and those of *now*, the current cultural climate and whatever the space's or building's surroundings have morphed into since its conception. Thus, they exist between several cultural regimes of knowledge. These often violent disjunctions in space and time that characterize contemporary diasporan experience, the physical effects of permanent exile from one's time, displacement, and incommunicability, cause a disjunction in notions of truth. These cracks in cultural memory can be teased out and reinterpreted through art, and new meanings, new histories gleaned from them.

In the first part of this thesis, I will examine the various ways in which architecture and urbanism are capable of knowing, representing and embodying the world. To do this, they must move away from the almost exclusively representational traditions that have held sway in spatial design since the birth of modernism. I will argue that architecture can, and often does, evoke these memories through the nonaudiovisual senses of touch and smell.

In the second half of my thesis I explore how certain spaces can appeal directly to the close senses: touch, smell, and *haptic visuality*. I will suggest that haptic spaces incite the viewer to relate to the space as an equal, in an intimate, embodied way, thus also facilitating the experience of other sensory impressions. I believe that by proposing methods or showing examples from within the discipline, I would unduly restrict the readers and my own thinking on the subject to dated, ponderous, established practices. One of the ambitions of this text is to provoke the reader to seek out the dormant and less obvious sensory abilities that already exist in one's own culture, in an undercurrent running alongside the more prestigious distance knowledges. As Marks explains in her own theory, which we shall return to later, these sensory experiences themselves are by no means separate. Rather, they come together to form a culturally informed "sensuous geography", an amalgam that covers our entire sensory experience of space. Through these sensory environments, a sensorium is formed in each individual, bodily organizations of sense experience with a cultural and historical origin.

1. What We Experience

1.1 Suspended Narratives

In this thesis, I will explore the ways in which architecture and urbanism create lived narratives through multiphased choreographies of excavation, falsification, and invention, or the creation of spatial allegories. The cinematographic philosophy of Gilles Deleuze, applied to the experiencing of architecture, perverted and redefined as needed, will form a large part of my frame of reference. I will mirror some of the work of Laura U. Marks in her book "The Skin of the Film", a decidedly insightful work on intercultural cinema. However my emphasis, aims and the conclusions that I draw are entirely my own. Deleuze himself draws eclectically from Bergson and Foucault, Peirce, Nietzsche, Leibnitz and many more to weave his own complex and strangely open-ended web. One of the most striking aspects of Deleuze's theorizing in his cinema books is how loose and malleable his thinking is. Upon viewing them, they present a staggering excess of cinematic material, new terms and multiple apparently contradictory views. It can be employed in the examination of intercultural cinema, as with Laura U. Marks, or used to shed light on an aspect of architecture that has not yet been exhaustively mined: the root and effect of spatial experience. Architecture, like critical cinema, can draw out some of the political, but more importantly many of the purely experiential aspects of Deleuze's cinematic theories. It makes for an odd kind of coherence, but a brisk one, that is able to lend itself to an analysis of a wide range of material, from films that Deleuze was never aware of all the way to things that are not films at all.

Among the most illuminating basic distinctions that Deleuze makes is between movement-image cinema, in which action follows action causally, and time-image cinema, which frees time from causality. As Marks describes it: "Simply, in the movement-image, Arnold grabbing the gun is followed by Arnold shooting the bad guy; in the time-image, Arnold grabbing the gun might be followed by Arnold going into a reverie, or perhaps a step-printed reprise of the gun-grabbing shot" (2000, 27). Deleuze himself attributes the rise of time-image cinema to postwar European directors such as Rossellini, Antonioni and Godard. The differentiation between movement-image and time-image became

possible in the confused space between prewar and postwar culture. He places great importance upon the "any-spaces-whatever" that seemed so prolific in that divide:

"The fact is that, in Europe, the post-war period has greatly increased the situations which we no longer know how to react to, in spaces which we no longer knew how to describe. These were "any-spaces-whatever", deserted but inhabited, disused warehouses, waste ground, cities in the course of demolition or reconstruction. And in these any-spaces-whatever a new race of characters was stirring, kind of mutant: they saw rather than acted, they were seers." (Deleuze 1989, xi)

The emphasis on spaces serves the purposes of architecture at least as well as it served the new, at the time, time-image cinema. Marks chooses to view the arising situation through the prism of postcolonial migration, diaspora and hybrid cultures then beginning to characterize the new populations of Europe and North America. In addition to Europe's industrial ruin, the colonial era too was largely brought to a close by events that originated or gained momentum in the war, its remains living on in the lives of displaced or undone peoples. "These people are "seers" in the metropolitan West, aware of violent histories to which its dominant population is blind. They possess what Fatimah Tobing Rony calls a third eye, which allows them to perceive the dominant culture from both inside and outside" (Marks, 2000, 28). This diving into the past, into grand theories of cinema and multicultural diaspora serves a smaller yet significant purpose. It can be read as an analogy to the microcultural divide present within every spatial designer, to whom the physical environment is present in a heightened state that is somewhat foreign to the layperson, who is in effect a kind of consumer of space. None the less, the architect must be able to work in a way that retains and creates contact with the nonprofessionals of our environments, despite not quite being of their world albeit auto-exiled only by voluntary choice of profession. Once the decision is made and the river forded, the change is permanent.

If this chapter seems somewhat mired in the past, it is because all architecture stems from, and is, a commentary on a cultural past and present, be it completely shiny and new or, as is

often the case these days, a modification of an existing structure. One cannot escape one's past; one cannot outrun one's frame of reference. I also tend towards the opinion that what one in fact constructs one's future with is the past. It is a kind of archeological approach combined with collage. But as we can see from Deleuze, any given discourse is not only limiting but enabling. While it is true that discourses delineate what can be said, they also provide the only language in which to say it. If one wishes to articulate anything at all, one has no other option than to speak one's emerging thoughts and opinions in the terms that have been established, while simultaneously breaking away from them. All change is a kind of waltz between deep, more or less solid historical layers and escape. In architecture, this translates as a need to work with what one has, and to work critically within the dominant discourse.

•

A truly contextual critical architecture can only work at the edge of thought, not quite a thought yet before one has slowly built up the language in which to think it. It does this while being constantly almost snuffed out by what can and is already being said, in a paroxysmal struggle for breath. The already sayable that this critical architecture fights is manifold; established history or established practice, multi-layered politics, economical restrictions, the list goes on. Some works confront the limits of thought and perception, making manifest the outline of that which is within our grasp and what is not. Others begin at the limits, edging them outwards. Still, one should not see this shifting of meaning and language as a direct move towards anything in particular. All representations will never become possible at any one time in the progress of human culture. Some become available as others fizzle away into nothing. Marks, writing of intercultural cinema, points out that the desire to make culture visible and understandable may itself be a temporary curiosity, a historically specific desire that is characteristic of a post-Enlightenment will to knowledge.

What I wish to achieve, the kind of architectural and urbanistic approach that I advocate, is to hold on to those possibilities of expression that are both menacing and enabling. I

wish to replicate and multiply the moments of thinness, suspension and waiting present in time-image cinema and in the any-spaces whatever; the moments of breach in predetermined narrative, when one ceases to follow along as though swept by a current, and begins instead to create a narrative of one's own, formed by both the inhabitant and the space together. Deleuze's any-spaces whatever are not empty, but compose images that arouse an emotional or visceral response. They are *affection-images*; images that usually lead into doing. In conventional spaces, they are directly followed by action, but in any-spaces-whatever, obvious actions are blocked, and one is instead opened emotionally to the experience of time.

"And thanks to this loosening of the sensory-motor linkage, it is time, a little time in the pure state, which rises up to the surface. Time ceases to be derived from the movement, it appears in itself and gives rise to ***false movements.*** *" "Even the body is no longer exactly what moves; subject of movement or the instrument of action, it becomes rather the developer* [révélateur] *of time, it shows time through its tiredness and waitings (Antonioni)." (Deleuze, 1989, xii)*

The moments of thinness, of penetrative uncertainty, need not be experiences with the horror of the void but can be encounters with a rich potentiality.

•

Deleuze argues that experience cannot be represented directly and as a whole, but can only be approached tangentially by the orders of the sayable and the seeable. These two categories cannot be reduced one into the other. They can in fact be viewed as reference points on a sliding scale; coequal, but never the same. Discourse and that which can be seen do not reveal all, but contain only what can be known at a given time. They both approach a thing obliquely, showing each other to be false by omission even as they require each other to be true. Deleuze's seeable and sayable, as most categories do, leave much on the outside. Symbolic representation appears to stray to both sides of the fence, and the totality that is multisensory spatial perception is left to drift. The points on the scale are not polar opposites after all, just points of reference,

barely fixed. One might do as Marks does, and add the order of the sensible to complete the trinity. By sensible, Marks is writing about the totality of what is accessible to sense perception at a given historical and cultural moment. As our discourse is limited by the language that surrounds us, so what we feel is limited by the ways in which we have learned to do so. By applying Deleuze's theory of cinema to spatial experience in general, one can begin to understand the image not through what is apparent, but through what is hidden, to find the edges of perception, and to look for what seems not to be but might be there. "Visibilities are not forms of objects, nor even forms that would show up under light, but rather forms of luminosity which are created by the light itself and allow a thing to exist only as a flash, sparkle, or shimmer" (Marks, 2000, 30, quoting Deleuze).

By way of clarification; the word "image" will, in general, be used in this text in the Bergsonian sense, i.e. not simply the visual image, but the compound sensory impression that a perceived object conveys to a perceiver at a given moment (Bergson,[1912] 1988, 36-38). From Deleuze's apparently endless categories of images, the *recollection-image* is of the greatest importance, and unique in its linguistic compatibility with the terminology of space. However, in order to fully comprehend its meaning, the theoretical equivalent of an alpine excursion is required. Deleuze, following Bergson, offers an image of time as constantly splitting in two; the time that moves forward, the "present that passes"; and the time that is snatched from the flow and represented, the "past that is preserved". Again following Bergson, he refers to these two aspects of time as the *actual image* and the *virtual image*, the actual image corresponding to the present that passes, and the virtual image to the past that is preserved. As they diverge, they create two separate representations of a single moment. The holiday snapshot, childhood home videos and such provide volumes of easy examples of the formation of virtual images. In the moment, the two images appear alike; but the present-that passes, the totality of feelings and context is gone forever, while the past-that is preserved becomes the official representation of the originary moment. Deleuze's virtual images (not to be confused with the virtual images of augmented reality, to be addressed later) frequently compete with recollection-images.

They are so powerful that they often override our memory of a situation, making it unavailable to voluntary recall.

A recollection-image is not, however, a memory nor the absolute image of a memory. It embodies traces of an event whose representation has become obscured, but does not represent the event itself:

"Bergson constantly reminded us that it was not by its own efforts that the recollection-image retained the mark of the past, that is, of "virtuality" which it represents and embodies, and which distinguishes it from other types of images. If the image becomes "recollection-image" it is only in so far as it has been to look for a "pure recollection" in the place where it was, pure virtuality contained in the hidden zones of the past as in oneself…" (Deleuze, 1989, 51)

The recollection-image may, through alert recognition, provoke an imaginative reconstruction, perhaps a flashback, that reconnects it with comprehensible causal relationships.

At times the optical image cannot be connected to any living memory. When looking at someone else's childhood photographs, an old, well used fishing rod and line leaning against the wall of a cottage, or a long abandoned house, one is confronted with a virtual image that does not match one's own experience, perhaps it matches no-one's, and yet it may call out for memory to be assigned to it. In these situations, when confronted with a failure of recognition, the mind creates. When we fail to remember, sensory-motor extension remains suspended; unable to connect to either a motor image or a recollection-image, the perception it enters into relation with genuinely virtual elements: dream-images, fantasies, a sense of the general past (Deleuze, 1989, 52) As Marks puts it: "When remembrance fails, the story must be creatively falsified to reach the truth" (2000, 50). She follows with a revealing and beautiful quotation:

"What I dread when I am asked to bear witness is not only or primarily the pain of accessing extremely painful memories; and/or the pain of discovering all or part of what I thought unforgettable; but that I am asked to definitively forget in order to release, this side of the event horizon, the created voice that can tell about a created but true event." (Marks, 2000, 50, quoting Jalal Toufic)

It is inevitable that remembrance will indeed fail, the various forgettings of cultural and personal memory will surely see to that. These disconnected images are adrift in history, they cannot be made to represent, refusing or unable to attach to memory. Yet there they are none the less, staring one in the face. "It is as if the past surfaces in itself but in the shape of personalities which are independent, alienated, off-balance, in some sense embryonic, strangely active fossils, radioactive, inexplicable in the present where they surface, and all the more harmful and autonomous" (Deleuze, 1989, 109). Harmful, yes, but mainly because they are irreconcilable with the dominant perception of the past, be it public or private. They reveal the inconsistencies and incompleteness of those histories, and as such are like buried treasure for critical architecture. If they can be made to connect with the narrative and thereby make it anew, they can reactivate the process of memory. In the next chapter these radioactive fossils will be dealt with more comprehensively.

The success of these thin images in engaging the viewer rather than merely vexing them depends on what stake the viewer has in the image. Recollection-images would also seem to prompt deeper reflection from subjects who feel strongly the turmoil they create. A very real fact of spatial design is that it does not have the purist luxury of opening only to those who are already predisposed to experiencing it. It is, however, an inescapable truth that a person whose curiosity has been piqued, who wants to know about the stories embodied in these images, will be far more likely to scour the image and attempt to breathe life into it. There is therefore a necessary element of seduction and guile in any space that would connect with people. The potential viewer has to be persuaded or shocked into engaging in this dreaming. There is a strong element of, if not universality, then collectivity in most spatial experience.

•

Deleuze would appear to acknowledge that some forms of knowledge can be collective, such as that of storytelling. When discussing perception itself, however, he seems to suggest that individual perception is not dependant on collective memory. It is here, then, that I veer away from Deleuze and look to Bergson and

Marks for insight into a theory of perception in which spectatorship is informed by an element of communal experience, if only in the form of cultural background. An injection of architectural grounding: in this sense one begins tentatively to near some of the ideas of Kenneth Frampton, specifically his intensely culture-based concept of critical regionalism. Marks writes: "Perception is never a purely individual act but also an engagement with the social and with cultural memory" (2000, 62). This is true of all viewing, but becomes far more explicit and pressing in the case of critical architecture, necessarily grounded in the social and in collective histories, despite often using individual stories to frame them.

The idea of duration is central to Deleuze's theory of time-image cinema, and this he appropriates from Bergson. It is a concept that depends on a person experiencing the passage of time.

"… the multitudinous successive positions of a runner are contracted into a single symbolic attitude, which our eyes perceive, which art reproduces, and which becomes for us all the image of a running man. The glance which falls at any moment on the things about us only takes in the effects of a multiplicity of inner repetitions and evolutions, effects which are, for that very reason, discontinuous, and into which we bring back continuity by the relative movements that we attribute to "objects" in space." (Bergson, [1912] 1988, 277)

Marks, pointing to Walter Benjamin and Emmanuel Levinas, suggests that Bergson's notion of *durée* is one without end: a deathless time, and as such ultimately a changeless one; a sort of never ending droning. She notes that for Levinas, the relationship with the other is actually in its very essence the relationship with the future. The endless and estranged sense of time that is attributed to Bergson by these various writers is not exactly that of life, as defined by transience and its eventual end in death, but an attitude of changeless undeath. In the films of Deleuze's choice, the experience of *durée* is actualized by not permitting images to extend into action, and severing all causal relationships. The meandering subject loses the ability to act and gains instead the ability to see; raising the question of what it is that he or she sees? There is ultimately not much point of seeing if no subsequent course of action is available. An answer can be found through analyzing the concept of memory.

Memory is not the tranquil surface of a pond that Bergson sees it as. It is closer in nature to a minefield. Bergson is so very cheerful and optimistic about an individual's ability to sample from the totality of experience. His manner is enragingly sanguine and phenomenological; he completely fails to acknowledge the potentially traumatic effect of memory. His *mémoir pure* is at one's beck and call, latent until called upon in action. As Benjamin, writing of Bergson, points out: "… only a poet can be the adequate subject of such an experience" (1968, 157). Benjamin goes on to describe Proust's critique of Bergson, in which the former introduces the two terms *mémoir volontaire* and *mémoir involontaire*, defining the first as the voluntary memory in service of the intellect. The second, involuntary memory, can only be brought forth by shock. Proust argues that the past is:

"… somewhere beyond the reach of the intellect, and unmistakably present in some material object, though we have no idea which one it is. As for that object, it depends entirely on chance whether we come upon it before we die or whether we never encounter it." (Benjamin, 1968, 158, quoting Proust)

Unlike remembrance, involuntary memory does not aim to protect memories but to disintegrate them. Remembrance in fact forms a kind of protective wall between consciousness and experience (Marks, 2000, 64). In this sense it is constructed of the layers upon layers of Deleuzian virtual images that form and established history. A shock, then, may be what Deleuze looks for in time-image cinema. What one sees in the image, in the suspension of motor extension, comes closer to the contents of repressed cultural memory than to a phenomenological "thereness". As Benjamin argues in his essay "The Storyteller", experience necessarily involves a connection with the social character of memory. In urban spaces, this connection becomes increasingly difficult to make when the social character of public life, according to Benjamin, has been undermined, or perhaps has rather changed into something as yet unrecognized or undiscovered.

If and when the recollection-image can be reconnected to memory, these cultural narratives can at last be experienced, and the spatial image shifts from time-image to movement-image. These

are the moments when one is able to identify and truly connect with spatial narratives; the moments of relief that follow moments of suspended emptiness.

Among the most powerful of all of Deleuze's images are what he designates *radioactive recollection-images*. Although they do not correlate to anyone's memory, they still struggle to relate the obscured histories of which they are the index. It is the architect's and the urban designer's task to make the connection apparent, to make manifest the narrative potential within them. Anything can be a recollection image: sounds, smells, an old tool, a texture, a space or a place. These material artifacts require the embodied memory within them to be teased out.

•

Images, like memories, are by nature multisensory. Recall from Bergson, that they are the complex of all sense impressions that a perceived object conveys to a perceiver at any given moment ([1912] 1988, 36-38). An image therefore is always both multisensory and embodied. Memory does not reside in the body, but it is in the body that memory becomes activated, able to call up sense experiences related to the remembered event: "… it will beget sensations as it materializes; but at that very moment it will cease to be a memory and pass into the state of a present thing, something actually lived" (Bergson, [1912] 1988, 179). Memory is embodied for Bergson, but in his assumption that memory can be easily actualized at will, he inevitably undervalues it. For Deleuze, however, time-image cinema does not forsake the body. Quite the opposite: it is in the moments that the body is released to its own gestures that perception is freed from its usual circuit, and one is able to think new thoughts.

"The body is no longer the obstacle that separates thought from itself, that which it has to overcome to reach thinking. It is on the contrary that which it plunges into or must plunge into, in order to reach the unthought, that is life" "Life will no longer be made to appear before the categories of thought; thought will be thrown into the categories of life. The categories of life are precisely the attitudes of the body, its postures." (Deleuze, 1989, 182)

A time-image, then, can be both experienced in the body and can induce a direct experience of time. In this way a critical architecture can in effect rediscover the body.

Affection-images that take place in any-spaces whatever lead, according to Deleuze, to sublimation; to contemplation rather than the *reaction* of movement. It is, however, a contemplation rooted in the body, not a purely intellectual response. These affection-images invite a bodily response, a feeling of vertigo, a chill, perhaps a shudder, but they do not extend into movement as might otherwise be the case. They are located among the unfamiliar and the unsaid, within divergent image and sound and other time-image trickeries and schemes that invite continued, embodied contemplation. The affection-image, according to Deleuze, is the province of what he calls ceremonial cinema. "The ceremonial body in intercultural films and videos is introduced at the moment when all other action has become impossible. Ritual connects individual experience with collective experience, activating collective memory in the body" (Marks, 2000, 74)

As an architectural analogue; Vesa Honkonen's preservation project of the Souru iron mill, as I discuss in the next chapter, was made as a kind of collective act of grieving for the village that died physically in 1908, and dies again in an inability to be represented. The ghost invoked by Honkonen wrings a kind of collective longing from the site. This is not a mere act of displacement, but a revealing of a kind of knowledge that is only stored in the memory of the body. "When verbal and visual archives are silent, information is revealed that was never verbal or visual to begin with" (Marks, 2000, 76)

1.2 Imprinted Space

Meaning, in the form of cultural and personal memory, can be encoded into things, objects, of any kind. Some of these things are small, moving along their own discreet trajectories through space and time, letting the world make them first, and then gently scar and blast them. Others are the spaces themselves, geographically completely stationary while the town and the city migrate around them. These move only through time, getting constantly scratched and scuffed by the highly contextual debris of the life that takes place within and around them. These movements through space and time, through culture, create images in which histories can be experienced and re-experienced, but never clearly read. They become a subset of Deleuzian recollection-images, physical objects that embody collective memory in a way that is absolutely inseparable from their materiality. They have been variously called fossils, fetishes, artifacts, and transnational objects, depending on how they store and release time and what purpose they are seen to serve. The common thread tying all these object-images together is that they condense time within themselves and can, when stimulated, experientially blow the viewer back in that time.

"Memory is not in us; it is we who move in a Being-memory, a world-memory." "From this point of view the present itself exists only as an infinitely contracted past which is constituted at the extreme point of the already-there." (Deleuze, 1989, 96)

Deleuze appears to be describing a kind of memento, an object from another time and/or place that brings its contents into the here and now. Everyone, every culture has them. They take the form of childhood toys or old cars still retaining a characteristic smell, the home team stadium, dancehall or maybe just a familiar path, Rosebud, anything that packs time tightly. They are also, of course, things that have a disproportionate meaning for different individuals. That being said, they are products not just of idiosyncratic, individual histories, but rather of cultural histories. "The past is a foreign country; they do things differently there" (L.P. Hartley). These things are recollection-objects from culturally displaced pasts,

and may have completely different meanings for different people. "The heirloom, the souvenir, the mass-manufactured object contain different and incommensurable stories of ownership, fantasy, and labor depending on who looks at these objects" (Marks, 2000, 78). Architecture and urbanism can both create such spaces and interpret ones that already exist, reintegrating their strangeness into the fabric of contemporary urban space, and releasing the past that is incarnate in them. One should also give due attention to objects and phenomena that at first appear isolated, idiosyncratic or private, because on occasion that may be the only way a widespread cultural movement is able to speak. This is often the case in situations where the liberty of a group of people is being restricted by another.

If the high-speed gusts of information, people and culture are the torrents of society, then the concepts examined in this chapter are mostly like undercurrents, forming pools and eddies in time here and there, rejoining its progression after a while. The temporal nature of the recollection-image lends itself quite well to the relative slowness of architectural change. Buildings have the time and leisure to condense the manifestations of changing, gaseous zeitgeists as well as concrete, day to day routine into their bulk. Meaning is encoded into these objects not metaphorically, but through physical contact. A human life or phase of life is relatively thin in time when compared to the life of buildings.

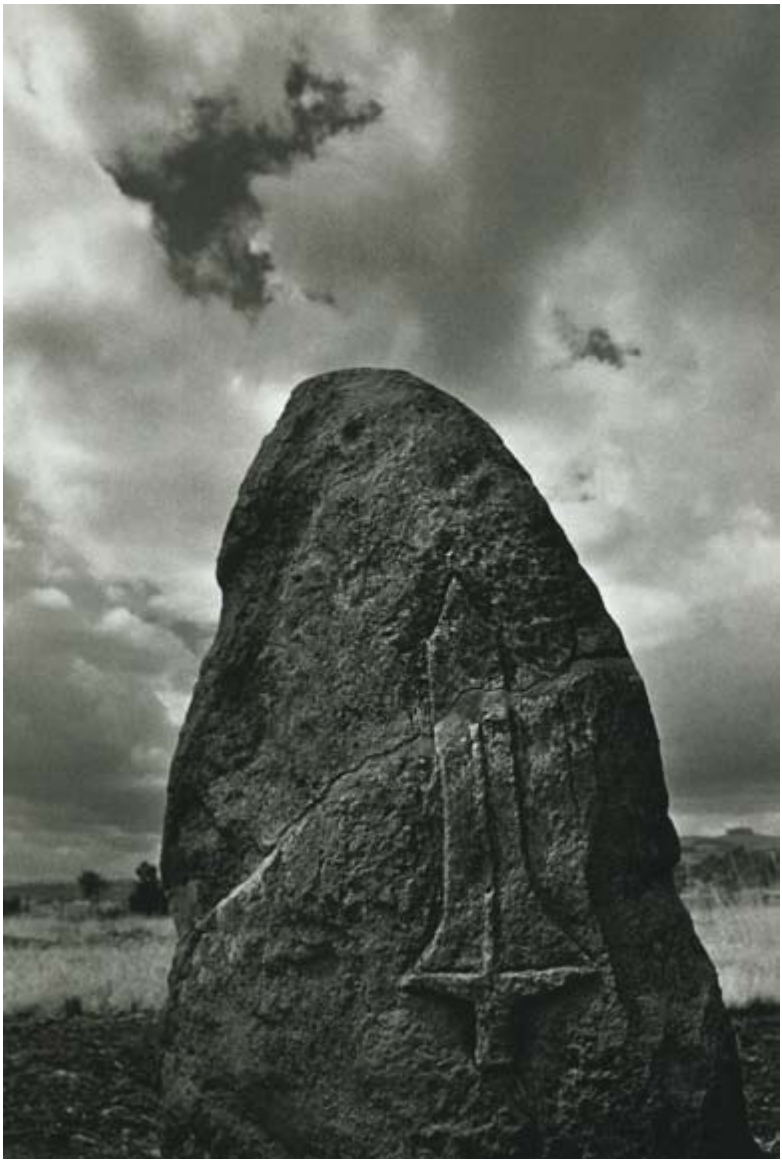
As historians have often demonstrated, objects are not silent witnesses, but communicate stories and depict arcs and paths. Architecture, like any other art form, is in its own way capable of discovering the value that resides in spaces; the discursive layers that take material form in them, the open wounds that become embedded in them, and the histories of material interactions that they encapsulate. These objects and spaces are not representations or simulacra of cultural changes and upheavals. They are their material artifacts. In "The Skin of the Film", Laura U. Marks makes an analogous attempt at pinning down embodied memory in intercultural cinema. She approaches the problem by reconsidering Walter Benjamin's concept of the *aura* as a way of conveying how objects encode social processes.

Benjamin wrote of the aura as that quality in an object that makes it humanlike in its relationship to people. When one looks

at it, it looks back. "To perceive the aura of an object we look at means to invest it with the ability to look at us in return" (Benjamin, 1968, 188). He attempted to strip the fetishistic characteristics of the auratic object of its mystical undertones, by showing that they only gain their power through material contact with human beings both in their creation and use. An auratic space by itself cannot be reduced to a narrative; it is indivisible, and can be experienced only through its material presence. It is not more or less than narrative, simply *other*. Aura, in this sense, is the faculty through which an object or space can speak to us of the past, while simultaneously preventing us from completely deciphering it. It is a contact with involuntary memory that can only be reached through shock: "… they are lost to the memory that seeks to retain them" (Benjamin, 1968, 188). Because they can never entirely satisfy our longing for the memory, we are repeatedly drawn to these spaces, returning to them again and again. There is a sense that an auratic object maintains its distance no matter how hard we try to grab it. They are present in space, but distant in time. Benjamin's auratic object is always something more than the remembrance it provoked in the individual; a fragment of an echo of the concrete social environment. It may be wispy and fragile, but it is not a mere figment in the mind. It has its seat in the thing itself.

•

The relationship of the recollection-space to the narratives it witnesses is not predefined, nor is how those memories can be decoded. Laura U. Marks implies three rough categories of cinematic recollection-object that one can here translate into spatial terms with relative ease. First among them is the space as an agent of the narrative. This subset of spaces actively takes part in the events that it records. They are those places that are as much characters in the stories they embody as the people that build and inhabit them; the dramatic backdrops or depressing hovels that accentuate the drama of the narrative, living settings that already had a relationship with people at the time a given tale was leaving its mark on them. The second category is that of the space as witness, the space as onlooker or voyeur, inconspicuously watching from the sidelines



Tiya, Etiopia

but never taking part, always passive. These are recollection-spaces that were there, so to speak, but had no effect on the outcome of the events. Perhaps they had no specific character before the events etched into them occurred, defining them. Their witnessing quality is enhanced by the neutrality implied by just watching and committing what occurs to memory. The third kind of recollection-object can at an earlier point in time have been either of the above, but we will never know. It is the object that is defined by its sphinx-like inscrutability. One is unable to connect the space to memory, and the object remains illegible. They are traces of histories so far removed that they have become inexplicable, truly forgotten. Of course, all recollection-objects are contained in any and all of these categories for a given value; the disinterested witness, the completely incomprehensible artifact and the fully legible space are all as mythical as a unicorn, nonexistent in any definition of the real world.

Recollection-objects often do not have a strong visual relation to the originary event that they embody. They are not representations of historical events. The meanings present in them are usually hidden away under layers of the dirt of time and may be expressed solely in terms of nonaudiovisual sense knowledges, according to a traditional definition of the term. In the second part of my thesis I will analyze further the meaning and implications that these burials and exhumations have for architectural spaces. For now, I return to an examination of some counterparts to the recollection-object.

In addition to the recollection-object, two other models are useful in describing the different ways in which objects store both the discursive shifts and material conditions of change. They are the *fossil* and the *fetish*. Fossils resemble recollection-objects, but differ in that they capture only a single given moment in time, an originary contact that gives them meaning. They are indexical traces of objects, animals or people that once existed but have now long since shattered, rotted or been compressed into some oily residue. In this they resemble photographs, but instead of being created by the contact between reflected light and film, a fossil is produced by the contact between an object and the witnessing aspect of earth. In both cases, the surface retains a trace, a cast of the life of the

Kaiju Daisenso (Invasion of the Astro Monster), 1965

object, even after the objects own inevitable decay. It is created in a moment in time, covered by layers and layers of other moments. Instead of succumbing to the pressure, it solidifies, until one day some upheaval causes it to resurface, to testify of some forgotten era. Deleuze's *radioactive fossil* is a special kind of fossil that has no common measure with the present. It is something unresolved from the past, buried away like a barrel of reactor waste, seeping into the environment until appropriately dealt with. Architecture, through the changes it imposes on the environment, is able to bring these objects forth, arguably to an even greater degree than cinema. To Deleuze, fossils are not inanimate, mute objects, but alive and dangerous. Not dead, but dormant. They often embody something that has been superficially forgotten, but if poked and prodded enough can awaken from their slumber to bring that memory forth, and begin to terrorize the area like some gigantic *Kaiju* monster from a Japanese disaster movie. A fossil need not be physically large to have this effect. Quite a small amount of radioactive material can be dangerous.

The term fetish operates in several fields, including anthropology, psychoanalysis and Marxist analysis. All fetishes are a rendering of an affect into a material object. The psychoanalytic meaning of the term is today perhaps the most commonly used of all. An object may embody time in the form of memory, as well as labor. Theories of fetishism finally boil down to descriptions of how meaning becomes inherent in objects in a way that cannot be translated into symbolism. The terms fossil and fetish have far more in common than separates them. The fetish can in fact be seen as much the same thing as a radioactive fossil. Benjamin's concept of aura is what makes the fetish unstable and unpredictable. It brings back only partial memory, never the complete thing. The radioactivity of the occasional fossil lies in the fact that the past it embodies is in fact not yet over, and threatens to burst into and change the contemporary world. In a fashion almost identical to fossils, fetishes are also buried in time and can be volatile when unearthed. A fetish too gains power through contact with something powerful, not by representing it, but the materiality of the birth of a fetish is repressed. They also resemble photographs in their indexicality. When seen from this light, it really is no wonder that indigenous

peoples of fetishistic, pre-modern cultures were frightened by this thing that would steal their essence and their power. Fetishistic power does not adhere to things but circulates among them. In her writing on the subject, Marks leans heavily on the neo-Marxist and anthropological understandings of the fetish, but I believe that for architectural purposes the psychoanalytic is more useful. The definitive difference between the fossil and the fetish rests in the fact that the fetish, according to Benjamin and following Freud, is inaccessible to conscious memory. It encodes aspects of collective life that can only be discovered through a shock that reaches all the way to the unconscious. " The archeological process of discovering the meaning of such historical fetish objects recognizes that they cannot be deciphered with finality, but must be treated as keys to a particular historical moment" (Marks, 2000, 88)

•

From Benjamin, one can glean a hint at a method for applying these fossils, fetishes and recollection objects in the practice of architecture and urbanism. The objects that Benjamin found in the 19th century arcades of Paris, albeit mostly in their smaller physical manifestations, are the refuse and cracks of forgotten or repressed histories. Not only that, they are also potential building blocks of new histories, new interpretations. The static appearance of mnemonic artifacts and spaces easily confuses the onlooker, their apparent fixity belying the volatile power that they contain. The architect as *bricoleur* has the opportunity to take these things from another time and, using collage, re-render and combine them to create fresh meanings out of that which the objects already contain. The *bricoleur* is able to experience their effects, but also to do something less common: he or she has cultivated the capability and the sensitivity to uncover the creative potential in these objects of the past, and use their transformative quality, their radioactivity, to create new spaces and objects. None of these memory-objects are the product of a single culture, but are always created on the border of two, on the divide between the culture of then and the culture of now.

The current state of urbanism (cities) and architecture (buildings), a frenzied, hyperactive flow of people from one place to another, is capable of producing immense amounts of fetishes and fossils. It has become almost a matter of routine for vast areas of land to undergo cultural shifts at once. These cultural transformations in the urban diaspora are mostly neither complete assimilations nor random hybridizations, although both do occur. What usually happens is that some cultural artifacts pass through the cultural check-up process while others are weeded out. Of course, what translates best to the dominant cultural environment is usually left, leading to most sensory practices being jettisoned. What is allowed to remain tends to be aesthetized and anaesthetized; domesticated symbolic representations of what came before. Signs that state clearly what they are, and allow for no flowering of sensory knowledge, a decidedly controlled and uncontroversial set of objects judged to be of good quality and an appropriate nature; a smokestack here, a giant crane there, but nothing subtle or surprising that physically remembers what the space, area or region was before and would still retain the ability to relate meaning.

Both fossils and fetishes contain a seed of change within, a dormant, drowsy sort of cataclysm. The histories that they carry inside are such that, once opened, reveal a present that is in some way untenable, not quite right. Their "radioactive" aspect arouses memories that have been buried away, setting off a chain reaction that causes newer, inert layers of memories to set off in turn associations that had been forgotten. The revolutions that ensue need not be of the kind that ends in blood running in gutters, however. Certainly these fossils from other times are volatile, and will react in uncontrollable and surprising ways when exposed to viewers, but even that kind of chaos itself is a reasonably conservative picture of urban life. The danger is, and one supposes it can be seen as one, that something emerges from these spaces that forces one to reconsider one's own position in the world. The experience can certainly be off-putting, but it is also a prerequisite for growth. If the status quo is "good enough", no change or development is provoked or indeed needed. Spatial fossils do have an embedded element of change within them, but they are only as destructive as the environment they are introduced into is inflexible.

View from the pavilion at Souru

•

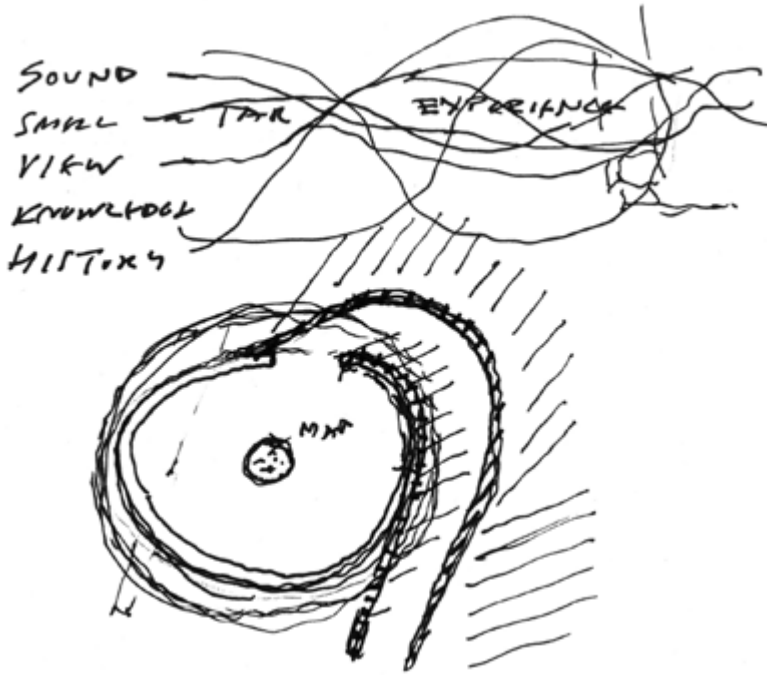
A finely tuned approach, and an exceedingly soft touch, was employed by architect Vesa Honkonen in his preservation project of the Souru iron mill village. The village is located in eastern Finland, near the city of Kuopio. It was founded on the edge of a lake in 1868, an era from which most historical Finnish iron mills originate. The heart of the compound was a large factory building incorporating a steam engine and steam hammer. The village was short lived: after only 37 years, a fire burned the housing area to the ground, and the village never recovered. In its heyday, it was home to a population of 600 people, had named streets with gas lighting, its own hospital and coal heated buildings. The housing was situated some 200 meters from the factory, close to the fields and the local school. Three years after the fire, the village was practically abandoned.

Early on in the year 2000, the Finnish National Board of Antiquities, after studying the site for a couple of years, decided to preserve the area. However, left to its own devices for almost 100 years, the site had reverted back to nature. In place of a village there was a forest of tall spruce. The eroded foundations of most of the buildings were still visible under the overgrown vegetation, but the only real structure left standing was the smokestack of the foundry. How to preserve something that has become nothing more than an outline on the ground? The decline of the area is an essential part of its narrative: it was born, lived, died and was forgotten. Fading away, being too weak to recover from the blow dealt by the fire was an integral part of the current identity of the locale.

A roundabout method of recreation was chosen. Honkonen enlisted the help of sound designer Juha Westman, and they proceeded to create a simile of the aural surroundings from the year 1893. The foundry was a noisy place; steam engine whistling, hammer constantly pounding in a monotonous rhythm, creating a permanent backdrop to the noises of a bustling village. The villagers worked long, 12 hour shifts night and day, there were boats on the lake, the children of the foundry workers were probably running around and shouting. Add to that the natural and more subtle sounds of the environment, the birds and whatnot. The soundscape

had to be housed somewhere, so a raised pavilion was built of rough spruce that gives off the smell of tar. According to Honkonen, it was intentionally unlike the original, now disintegrated ruins of buildings, connecting instead to the surrounding forest if anything at all. The pavilion is really not the point; it is almost incidental, only there to be a shell. Honkonen himself writes of the pavilion: "The aesthetics of this form will be revealed when the light has the chance to play the play of shadows. Walls will reveal the surroundings through its slots, like fragments. Brown tar treated wooden structure is playing with the rhythm of pine tree forest." This is patently obvious nonsense, required lip service to the way architects write, so embedded into the culture of practice it becomes habit. The form and aesthetics of the new construction have almost no part to play in the total experience, or at most an acoustical one. In effect Honkonen chose not to build, or as near as possible since some shelter from the elements was required.

The piece itself is formed in the collage of the fragmentary ruins, the fossil traces of the past, and the artificial soundscape complete with banging hammer and cheerful, industrious life, a ghostly echo of that which populated the area. It has very little to do with whatever form was injected therein. Combined with the wind blowing in the trees and the dark woods, the total effect becomes very powerful, and not a little creepy. In fact it is often the case that resurrected memories take on a macabre air. The result of these efforts is the consummate example of experiencing a lost thing, while knowing very little of it. For the spectator, the eeriness of the environment reflects a fall through the gap between what can be seen and said, a gap that contemporary architecture tries to keep closed. In Souru, access to direct historical images is blocked, and the environmental totality becomes a Deleuzian recollection-image in itself, vaporous and phantasmal. Despite the fact that historical representation has effectively been lost, the affect of the spectre is undeniably persuasive.


SOUND
SMELL
TAR
VIEW
KNOWLEDGE
HISTORY
EXPERIENCE
MAP

1.3 Sense Memory and Transience

The close senses, those proximal to the body, function through decay. Sight, in contrast, is quite abstract, relying on light to convey the sensory experience. The corrupting effect of light on an object is certainly real, but light also acts as a proxy between the object of a look and the eyes. Practically imperceptible in itself, light puts distance between the subject and an already negligible element of decomposition. Sound functions in a similar way, although the rubbing and banging required to produce sound waves is usually more detrimental to the physical integrity of their source than photons; after all, the roar of an engine is produced by repeated small explosions. Human voices originate in the larynx that controls their pitch and volume, a corporeal source for so abstract a product. The larynx itself is under chronic wear, held together only by the body's constant and temporarily successful, but ultimately futile battle against entropy. Smell, taste, and touch, however, connect directly with the object, either through unmediated contact with the thing itself, as with touch and taste, or with its microscopic molecular emissaries wafting through the air, eventually reaching the nasal receptors. It is only a matter of scale. Sense experience, then, is reliant on the changes imposed on an object by decay. When one smells something, one is participating in its eventual destruction in conjunction with all the others who ever smelled it before. Recollection-objects go through an analogous process, connecting with memory as they break down, memory in turn generating sensations in the body. Much of the history embodied by recollection-objects is only available to the near senses, or an approximation thereof. These subjects will be conjured up and elaborated on in the second part of this master's thesis.

Sense memories are also the most fragile, somewhat defenseless against the onslaught of time. If time can imprint meaning on an object, it can also wear it away. In symbolic representation, this is not as much of a problem, though symbols themselves only last as long as their physical manifestations. What is lost in longevity and robustness is gained in the evocative power of sensuous memories. The power of touch, smell, and taste lies in their transitory nature. The spectral recreation of the village in Souru

presented in the previous chapter is a perfect example, a poignant impression of the area. Although it is a recreation, it is an ethereal one, not prescriptive, effective as an experiential reminder of the history of the area without delineating or focusing the onlooker's attention in any way.

To experience for oneself the need for multisensory experience, to provoke memory, one need only compare looking at a photograph from some earlier time of life, and compare the emotions that are awakened to those brought forth by cuddling an old toy, experiencing its weight and feel, smelling the poignant and often distressing smells of infancy and dust. It is undeniable that the photograph too can awaken memories, but they tend towards a prescriptively narrative kind memory; "what was done", in effect. This is not to say that a photograph can not be a recollection object, if its haptic nature is able to surpass the optic. The memories, drawn out by the optical look, are memories that can also be called out by force of will. The picture may remind one of something, yes, but usually they are essentially things that one can view critically and from a distance. When touching and smelling a recollection-object or space, on the other hand, one is in effect climbing inside the skin of one's childhood. One is not entirely defenseless, but a hybrid of adult and child, vulnerable to a degree that the Foucauldian gaze does not allow for, calling upon the sort of knowledge that can only be had in the physical presence of an object: a tumbling cascade of spontaneous remembrance. One is transported and can feel the presence of the past: vulnerability is the real catalyst of change. Ultimately, such an experience is defetishizing as sense memory restores the history that has become fossilized in the object.

When spaces or objects are divorced from their original cultural contexts, it is usually the non-visual aspects that are forgotten first (or temporarily shuffled out of the way). This is evident in such things as museum exhibits that store artifacts behind panes of glass, reinterpreting as primarily visual objects that were originally meant to be touched and handled, or had a distinctive odor. Presented with such a situation, admittedly a less common occurrence than it once was, one cannot help but misinterpret the objects and thus the meanings in question. Fossils and fetishes from other times and other climes already suffer from a loss in translation. The meanings

that they embody are not automatically universal to all comers, though they have a common element, but to completely strip them of their multisensory origins is just pig-headed. These are the ruins covered by the glass walkways of museum floors and the carved figurines of fragrant wood. Certainly they'll last longer, shielded under glass, maybe even long enough for great multitudes of people to profoundly miss the point of the exercise. Of course, at first, a western person's culturally informed reaction to an object hailing from an exotic culture may be not to know what to do with it, and possibly feel a kind awkward displeasure at being confronted with such a situation. It can be argued, however, that Eurocentric cultures simply have their own potentially sensuous ways of relating to their environment. I will return to this argument in the coming chapters. One can, of course, also see why this is done in museums with unique cultural relics, but one should bear in mind that this is not the default state of the world, or the most conducive to understanding. Options are available for when the occasion demands. For now it is sufficient to acknowledge that fetishes have a dynamic element to them, a kind of life, with the power to affect their surroundings that distance and separation can strip away.

There has been a general move towards more sensual western art in the last decade or so, presenting an opportunity to further develop these faculties. The certainty that sensory knowledge stands in opposition to intellectual knowledge has begun to weaken. As we begin to seek out our own cultural sensorium, we can also see those of others in a different light, evaluating how we assimilate and filter out the knowledge of the senses. The fetish, by being very much physically one with what it represents, questions the idea that only the distance senses, especially vision, lend themselves to knowledge. Fetishism in the architectural sense is a form of embodied cultural knowledge, not the revealed knowledge of phenomenology, which suggests that meaning inheres in the communication between self, objects and others even when not directly mediated by the mind.

In the previous chapter, objects that travel through time were referred to as auratic. While moving along their paths in space and time, being owned and used or lived in, they become unique. The recollection-space as a kind of recollection object is exactly auratic: "The authenticity of a thing is the essence of all that

is transmissible from its beginning, ranging from its substantive duration to its testimony to the history which it has experienced" (Benjamin 1968, 221). What makes an object auratic is not simply their ability to awaken memories in an individual, but that they contain social histories in fragmentary form – Histories too unstable to be related as conventional stories. The tragedy of the burning of Souru is just such a case, of which the narrative facts can certainly be told, but the emotion and desolation is not conveyable by those means. "Aura is not merely a human presence that narrative uncoils from the object like a ball of string" (Marks, 2000, 120). Spaces have their own autonomous lives, untied from the human relations that they encode, and outside of their narrative significance. Their being, their materiality in itself is significant.

When a radioactive recollection-object successfully connects with memory, it also connects with the communal narrative and its "radioactivity", having now mutated the culture into one capable of accommodating it, is neutralized. The dissolution of the fetish, on the other hand, is accomplished by its re-embodiment. Once this embodiment has taken place, i.e. when the body remembers, the fetish ceases to exist in its volatile state.

Fetishes that are created in the shift between the culture of then and the culture of now are in a sense concrete manifestations of a state of yearning, produced when what has until then been inside the culture moves to the outside. Something that used to be a given in one's own culture becomes an object of deliberation. As their method of coming into being implies, they only exist as fetishes for as long as the embodied meaning within them remains incompatible with the new cultural environment. When the environment is able to accommodate those meanings, the fetish tends to dissolve. Fossils on the other hand retain the shape of whatever cultural cataclysm formed them, inviting a perpetual re-evaluation of the past. Their "radioactive" quality may certainly fade as connections are made to the historical stratum of their origin, but they do not disappear.

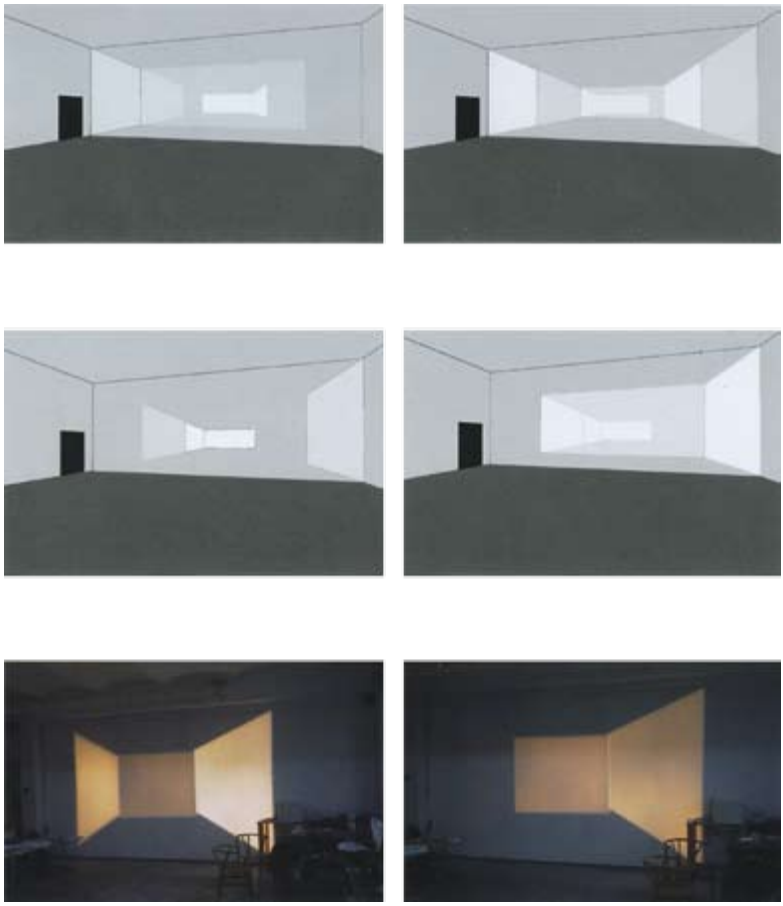
1.4 The Virtual and the Real

"Viewing a thing from the outside, considering its relations of action and reaction with other things, it appears as matter. Viewing it from the inside, looking at its immediate character as feeling, it appears as consciousness." (Peirce, [1892] 1992, 349)

In this chapter, a brief argument will be presented about the materiality of digital images and the connection that they have to the processes that bring them about. In a sense, it is a recognizing of the memory of atomic particles, and its function is to throw the reader suitably off balance for the analysis of multisensory hapticity that will follow in the second part of the thesis. This chapter will quickly describe how we can constructively understand virtual space, or more specifically *augmented reality*, i.e. physical space with a virtual element added to it. Not to view them as virtual, transcendent and distinct but as material, immanent and connected; as part of this reality rather than as an alternate one. I will try to shift the architectural understanding of the virtual aspects of reality from a transcendentalist and futurist discourse towards a more physically grounded one.

Augmented reality is an environment that encompasses both virtual reality and physical, real world elements. One of the more focused descriptions, and one that has come to be understood as representing the whole domain of augmented reality, is that presented by Ronald Azuma; it is an environment in which: "… 3D virtual objects are integrated into a 3D real environment in real time" (1997, 355). It is in fact another method by which an enrichment, both experiential and functional (if indeed the two can be entirely separated), of our physical environs becomes possible. I will not delve into the historical continuum that is augmented reality, from the ancient shadow play and *laterna magica* to the contemporary AR world of high tech goggles, ubiquitous computing and "intelligent surfaces". Rather, I will concentrate on its experiential and material aspects that have in many ways remained unchanged, in an attempt to analyze the situation as it stands today.

My critique is not with virtuality itself, but with the assumption that what is virtual is also immaterial, or transcendent.



Olafur Eliasson, *Remagine,* 2002

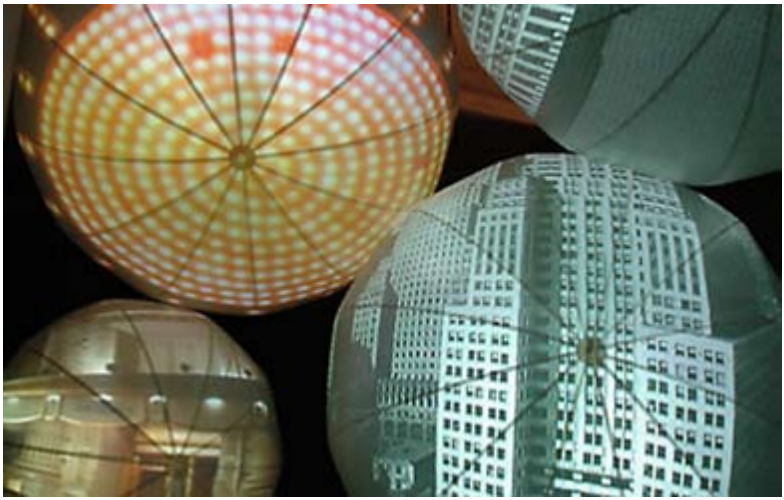
Of course, it is digital media themselves that invite us to make that assumption. By their very nature they abstract experience into information, and in a fashion they do invite us to mistake their information worlds for a separate, fantastical reality, distinct from the seemingly humdrum, physical, ordinary one. It should be pointed out that the virtual does not equal the digital, as many sound and projection systems can testify. I would follow by arguing that even the digital is not exclusively so, but is created by the analog, by human hands and human minds, and becomes analog again in the moment of experiencing through the senses.

Once the decision is made to attempt a materialist understanding of virtual media, one is confronted by the need to assess architectural "materiality" itself. In a phenomenological understanding of architecture it informs the directness and irreducibility of lived experience. Materialism appreciates the world in its transient and carnal state, and is in that sense willing to face and recognize eventual destruction and death. The temporal nature of the virtual is of a different kind, ambiguous and subject to control, perhaps more akin in lifespan to a mayfly than a building. Here for a brief flash, gone in the next, it often has the materiality of air rather than stone. It is a paradox typical of the virtual that it is seen as deathless, yet somehow obviously temporary and soon to be outdated at once. That augmented reality is seen as standing outside of time is as much a fiction as the impression that a building is of every time. What finally unifies the materialist approach to virtual media is a conviction that reality is interconnected in multiple ways, and that this interconnectedness can be made apparent, despite the false transparency attributed to digital media.

•

Every virtual effect has its root in hardware. A smoothly running platform has a beguiling, spurious translucency that fools us into believing that we are operating in a virtual domain. Achieving this illusion is in fact the goal of most software companies. If, however one happens to have a system that is older, with lower bandwidth and a low-quality screen, for example, one soon sees through the surface and into the decrepit machine itself. Failures

Imaginary Forces, *Bubbles in the Wine,* 2006



Imaginary Forces, *Bubbles in the Wine,* 2006

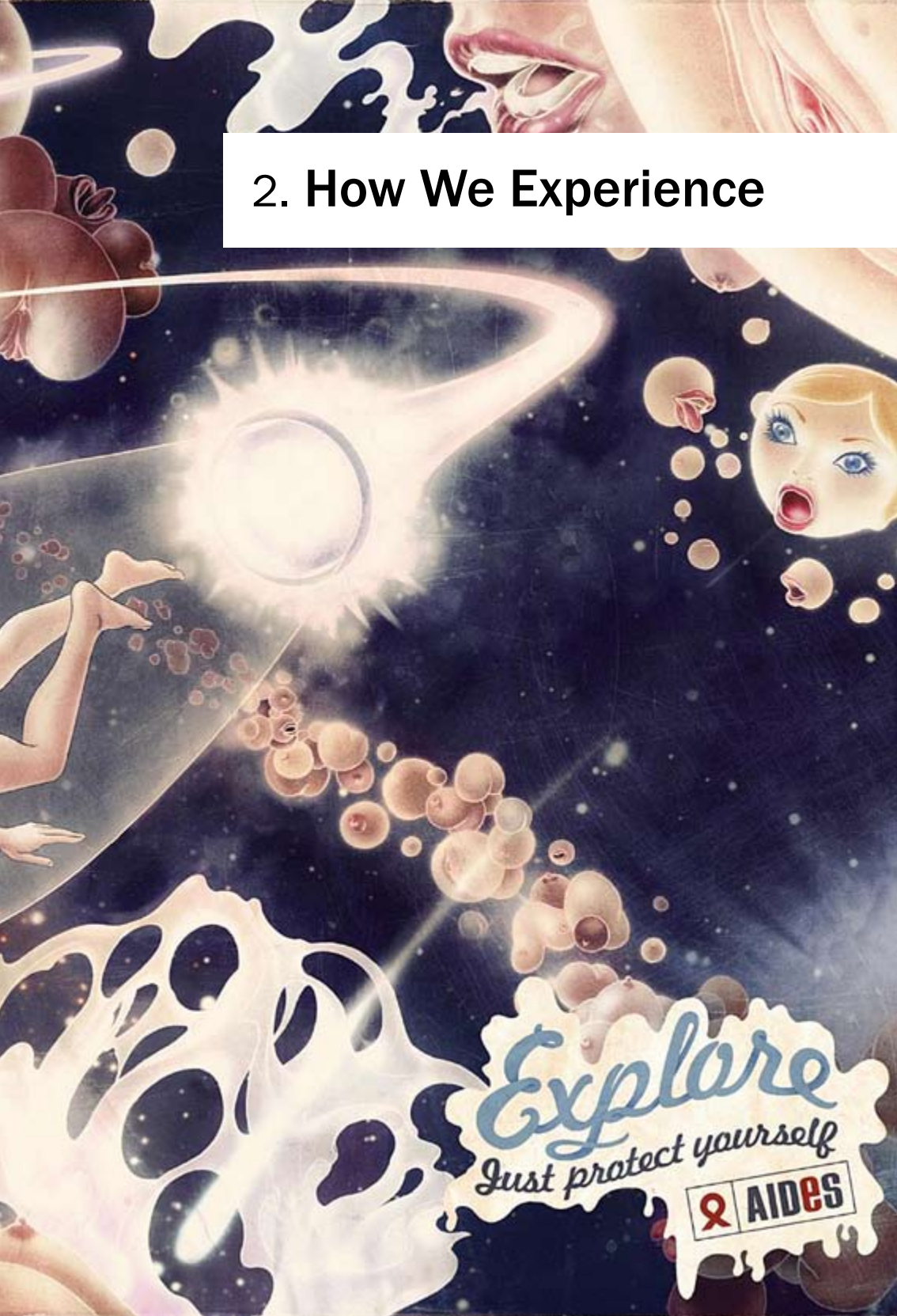
of hardware are a reminder of the physical being of virtual objects. The materiality of software on the other hand asserts itself in the form of incompatibility, viruses and obsolescence. In this way, the shortcomings of software and hardware are analogous to the functional design of a building; they are the products of their time. Software and hardware, however, are relatively easy and cheap to replace and reprogram. They are adaptable and modifiable to an extent that a building never can be, and could be used to far greater effect than is currently the case in buildings of which these characteristics are required. What is actualized on the screen or reflecting surface is only part of the truth. Technologies die in the same way that buildings do.

Ubiquitous computing, smoother, approachable interfaces and the inevitable melding of the technologically illusionistic into lived space is easily as great an opportunity as it is a difficulty. It requires a rethinking of one's approach to space, from something seemingly fixed and specialized into something amorphous or unstable, lending itself to a different kind of materiality. The virtual at its most chameleonic can simulate and recreate; think of the aural vista of Souru, but it also has a materiality of its own, things that only it can do and twists that it can turn that no physical medium can replicate.

The pragmatic argument for the materiality of the virtual may be the strongest one of all. Following Deleuze and Guattari, Bergson and Peirce, one comes to the conclusion that, while the world may not be a material entity, it is to all intents and purposes real. It is what might be called the plain of immanence. That which, according to Deleuze and Guattari, contains all that exists and all that could exist. Bergson would say that the actual emerges from the virtual as someone or something perceives it. According to Peirce, originator of American pragmatism, what is actual is that which has an effect, i.e. something that produces a belief that leads, or can lead, to action. For Peirce, even if mind comes first, matter is what we act on. "There's no need to say anything transcends this material life; it's enfolded in it" (Marks, 2002, 179). It would simply be incredibly advantageous to set aside the dualistic way of viewing the virtual, if only for the reason that it does not serve the reality and scope of contemporary spatial expression. Not doing so, on the

other hand, would be a denial of the prevalent culture and time, ensuring the marginalization of architecture and its stagnation into archaistic aestheticism. These methods and mechanisms are already being used. If they are denied by architects and urban designers, some other faction will assume control of that rich and dynamic aspect of contemporary environments, and deservedly so.

2. How We Experience



2.1 Beyond Sight and Sound

In the previous chapters I have explored the concept of several ways of inscribing meaning into objects in the guise of mnemonic representations. In this and the following chapters, I will examine the ways in which the intermingled senses, more specifically a different kind of vision, a vision of touch, allow us to decipher these memories. The aim in all this is to heighten the understanding of the abundance of mechanisms that are at work in spatial experience. By doing this, it may be possible to enlarge the repertoire of methods available to designers for expressing some things that may now seem inordinately complex or inexpressible.

Although by way of examples I have, as of yet, discussed only Souru, I hope that it has underlined the limits of sight and sound; images and objects quietly secrete away as much as they show. Some meanings can or do exist completely outside of the audiovisual record. Certain kinds of meanings hide in the cracks in between the senses, so to speak. For these to become accessible, the edges of sensual experience must trace their outlines in our mind. The art of Mona Hatoum, among others, uses these meanings-in-between to bring about experience of subjects that defy direct audiovisual representation. Longing, repression and distance are recurring themes in her intercultural work that spans the media of video, installation and still images etc. In this chapter, I will attempt to elaborate on how architecture provokes contact to embodied knowledge, through a kind of touching by looking, in order to recreate the memories that are the bearers of meaning. Architecture incorporates traces of sense memories that are unable to break out through modernist audiovisual expression.

Places, like other things, can bring with them a multitude of complex, personal and cultural meanings that are intricately connected to who we are, and are encoded into our bodies. These things do not, need not hold within them some primal meaning or cosmic secret. They can be mundane, almost trash, an overpass under which the kids of a certain area used to hang out, a cheap Star Wars figurine, anything that personifies time. The meaning they have for an individual is usually not the total of what the thing is. The Star Wars toy can be the product of oppressive child labor,

Mona Hatoum, *Exodus I,* 2002

Mona Hatoum, *Recollection,* 1995

for all we know. Not everything that is imprinted on an object can be unraveled by just anyone. They hide stories within them that can be translated only imperfectly. Architecture cannot approach these meanings directly, but must adopt an oblique approach. In the process, the audiovisual quality of the object can seem to simply melt away.

A great deal of commonplace experience avoids visual record and is kept by the other senses. The eye is a powerful but ultimately selective sensory organ. The near senses, those that are closer to the body, like the sense of touch, are repositories of potent memories lost to vision. Hearing, as a sense that is constantly switched on, is also closer to the body than vision in a very concrete way; aural noise is infinitely harder to filter out than its visual counterpart. Those senses whose images can not be recorded are where the most private of memories nest. The mundane experiences of our every day lives, like a constricting tie on a hot day or the familiar weight of some object, a discomfort that we become so used to that it becomes a part of us, an ache, all these things we carry with us only in our bodies. Among the most poignant embodied feelings is the feeling of a lack, or loss. Grief, for example, can be an intensely physical thing. We feel an overwhelming longing for the physical presence of a parent who has passed away, for their touch or their characteristic smell, or a child whose weight in one's arms can't be felt again. These things, these emotions have no audiovisual expression. They are the ultimate private emotions, completely intertwined with our physical being, yet often universal at the same time, somehow typical of the human condition. Memories like these remain, embodied, even after their stimulus has gone. In these cases memory provokes experience rather than the other way around. Clearly some of these memories are not wholly personal, but shared. Social memories can thus be carried in individual bodies. In this way, even the memory of the sense itself can be thought of as a cultural artifact. The sense organs are where culture meets the body. Images can record memories that defy language. When optical images fail, it may be fruitful to look to the memory embodied in objects. In deciphering them, we approach the memory of the senses.

Wolfgang Tillmans, *Faltenwurf (Blue Shorts),* 1996

Wolfgang Tillmans, *New Family,* 2001

What will follow is a description of an emphatically multisensory way of experiencing the environment, even while it has its origin in vision. I will not explore the many ways of reproducing a truly multisensory environment. These methods are, I trust sufficiently obvious by now. Variation in microclimate, the aesthetic interplay of light and shadow, acoustic design and so on will not play the lead part in this text. They already have and have had many proponents both traditionalist (Junichiro Tanizaki, In Praise of Shadows) and less so (e.g. the installations of design company Imaginary Forces). Neither will any of the specific technological methods of creating artificial multisensory environments, such as the fully controlled olfactory environments witnessed today in malls across the world. My efforts will mainly be concentrated on demonstrating how spatial design, with methods already at our disposal, evokes the near senses.

Having said all this, one should note that visuality is not the daemonic thing it has been made out as, nor can visuality be fully understood as just one thing. The control-based Foucauldian critique does not apply to all visuality, though it may apply to the strictly optical, dominating variety. A number of theorists have been reevaluating vision as objective and intersubjective, instrumental and noninstrumental, a vision that is masterly and a vision that allows its object to retain its mystery (Marks, 2000). Furthermore, not all mastery and domination, much less the type of vision that aligns itself with them, can be condemned. Rather, the goal here is to point out that vision is not a set, rigid way of experiencing the world, but a continuum of distance and embodiment, of the optic and the haptic. There is a way of seeing that surrenders control to the object, one that is not *exclusively* cognitive but concedes its seat in the body: a vision of touch.

In addition, the near universal dominance of vision is somewhat justified. Human beings could not function if they were completely in tune with their bodies at all times. Our bodies are under a constant barrage of sensory information. If we actively noticed and were forced to react to every touch, every taste, smell, firing neuron, peripheral sound or image, the movement of our limbs, beating of our heart and pumping of our lungs, we would be incapable of focusing on anything outside of our own physical

Chris Cunningham, *Flex,* 2000

self. Total embodiment would be a paralyzing state. Our survival, both prehistoric and contemporary, is reliant upon a certain level of distance from one's own body. Such alienation is crucial, a prerequisite for life. Vision, as the sense most distant from ourselves, the easiest to guide and focus as needed, and capable of sensing over a distance is the only one that can provide us with this separateness from ourselves. Vision is also versatile. Touch cannot sense from a distance, no matter the circumstance. Vision on the other hand is in some way capable of covering the entire gamut of near to far. In addition, technological extensions push the definition of "far" to a practically infinite horizon.

In the past two decades, the cognitive sciences and anthropology have taken a fresh interest in sensuous epistemologies from various angles, including the psychoanalytic and the historical. Simultaneously, many artists with apparently not much in common, like the photographer Wolfgang Tillmans and film-maker Chris Cunningham, have adopted a more tactile or multisensory approach to their work. Tillmans has taken to snapping extreme close-ups of clothes and skin, or simply manipulating or disfiguring his photographs during the development process, scarring them or hiding something from view. Cunningham's "Flex" (2000) created in collaboration with Aphex Twin tracks a very physical relationship through sound and image, inviting the viewer to engage with an intensely multisensory experience. For some, the visual appeal of their work has been diminished by it, their value to be found elsewhere. For others, the approach has proved to be a more holistic one, the many facets of their work feeding off of each other. Of the artists who deliberately work with a multisensory intent, Heli Rekula among others seems to embed a critique of ocularcentrism into her pieces. They peck at the limits of visual knowledge, block a passive approach to their work, bullying or seducing the viewer into an active and critical relationship with their images. "Don't believe what you see, but think of the image as a box whose contents you must infer" (Marks, 2000, 134). Some of her work will be examined in greater detail in the following chapters. Many of these works engage the sense of touch in an indirect, proximal way that substitutes the physical touch with a kind of caressing look.

2.2 Haptic Visuality

To explain haptic visuality and examine its relevance to architectural expression, we will begin by examining hapticity in general. Haptics commonly refers to a branch of psychology that investigates cutaneous sense data, i.e. data relating to the touch. The spectrum of haptic perception however is more comprehensively defined as encompassing tactile, kinesthetic and proprioceptive functions. Proprioception derives from the Latin, *proprius*, or one's own, and perception. Through it one senses the position of parts of the body in relation to other parts. Kinesthesia as a term is sometimes used interchangeably with proprioception, but it usually places a greater emphasis on movement. In conjunction with the exteroceptive senses, through which we perceive the outside world, they form the totality of the experience of being and moving in space. Haptic visuality is an extension of this interoceptive, tactile sensory spectrum: "In haptic *visuality*, the eyes themselves function like organs of touch". (Marks, 2000, 162)

Materials, surfaces and movement traditionally play an important part in architecture, but why this is so is not generally as clear as it should be. We care about what our environment feels like to the touch, but rarely walk around stroking the walls. If someone does, it comes off as pretentious. Really, what can you expect; slightly counterintuitively, it really isn't how the tactile aspect of buildings is usually experienced. Moments of direct, unmediated physical contact certainly occur, in the mundane labor of walking and climbing or touching doorknobs and balusters. Yet this is not enough to explain the magnitude of our need for tactility, nor is the old chestnut of how a space sounds. Architects build great swathes of stone or concrete floors, only to go to painful lengths to dampen the acoustic cacophony that follows. A simile for human spatial experience can be found underwater, in the life of tropical fish. The Royal Angelfish, say. They spend their lives floating through giant underwater caves and passages of stone and choral, flitting in and out of them, but almost never touching the sides. I would argue that we experience architecture in much the same way as we experience cinema and *its* sensory tactility. The connection with one's environment is not as simple as one might assume, yet it is no

Peanut Butter

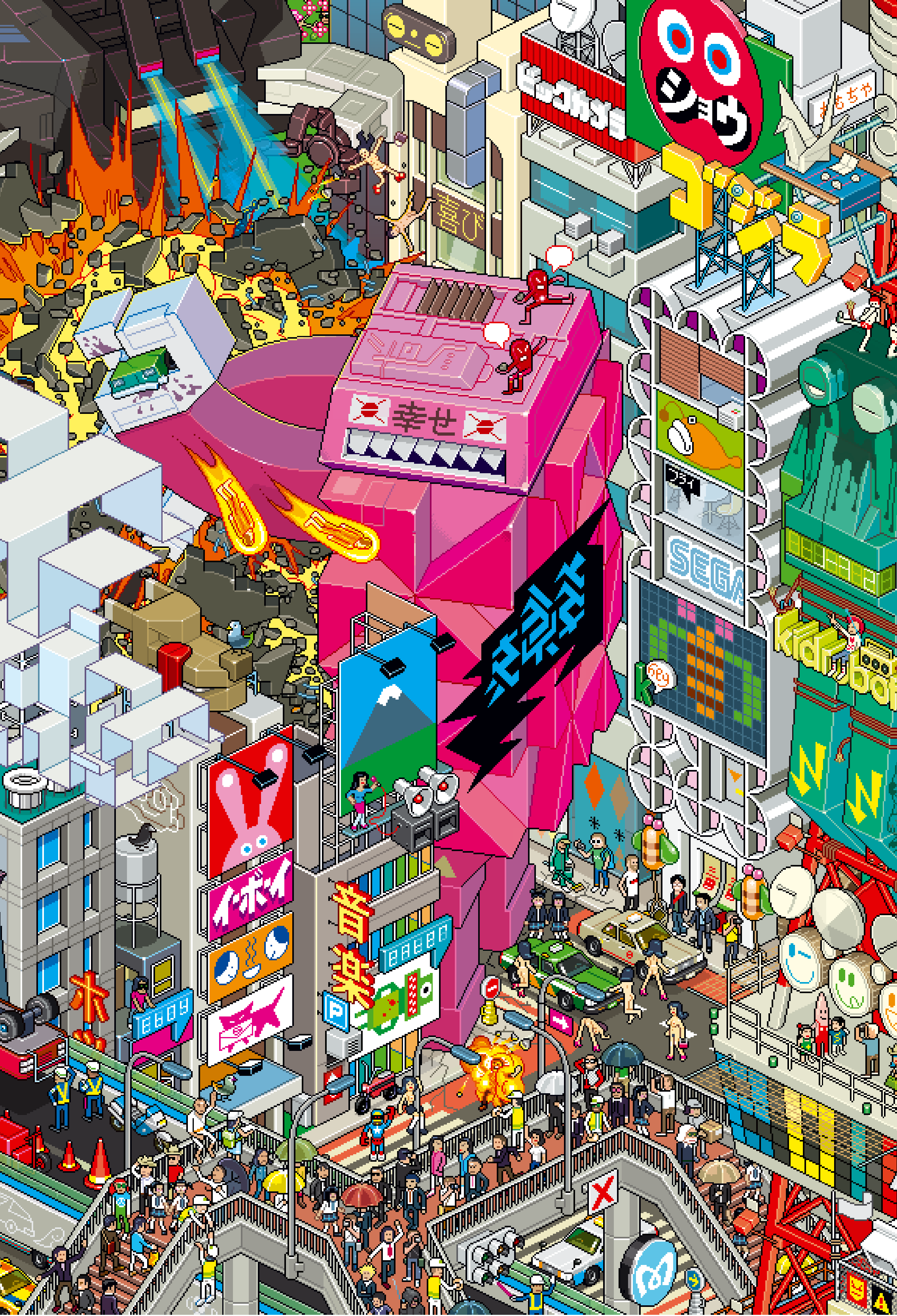
Jelly

less direct. In addition to clarifying the overall understanding of how one experiences actual, physical space, this approach acknowledges the entire array of expression that is *augmented reality*, and therefore forces one to rethink the established relevance of "real" physical materiality.

•

In my writing I borrow the concept of haptic visuality from Laura U. Marks as she presents it in her works on intercultural cinema. I apply it to architecture, slightly adjusting it around the edges and changing focuses where needed. She herself derives the term from 19th century art historian Aloïs Riegl's distinction between haptic and optic images. Riegl borrowed the term from the German *haptein*, to fasten, believing that *tactile* would be understood too literally as "touching". Haptic visuality, according to Marks, is separate from optic visuality, which sees things from a distance both in the physical and emotional sense of the word. Through optic vision, we are able to perceive distinct forms in space. It requires a separation between the object, that which is seen, and the subject or viewer. Optic vision incorporates its own dynamic, in which the viewer has power over the perceived object. It is a form of gazing, as described by Michel Foucault (1963). Haptic looking, on the other hand: "is more inclined to move than to focus, more inclined to graze than to gaze" (Marks, 2000, 162). It skims over the surface of its object, discerning texture rather than recognizing form.

The nature of the haptic image is such that it invites a different kind of relationship with the viewer, one that is more objective than that which the optic engenders. An optic image characteristically lays down its arms before an all-conquering spectator, and allows itself to be dominated. In a sense it is very like any other relationship defined by power: the dynamic relies upon a show of force to work, thus apparently preventing the formation of any other, deeper interaction as long as that power structure remains intact. It is a curious occurrence that of the two, the mode of looking which is more dependent on power is also by far the more passive. In haptic vision, one gives up the emotional and physical distance between the subject and object,


幸せ
喜び
SEGA
音楽

intentionally becoming vulnerable, and actively throwing oneself into an experience.

A haptic image can be offered by film, video, photography, installations etc., while the term haptic *visuality* underscores the viewer's willingness to perceive them. For the purposes of understanding how it is experienced, haptic architecture can be seen as a subset of visual image, a haptic object with a strong visual component. Haptic images clear up into shapes gradually, sometimes not at all. They invite the eye to glide on the surface before one realizes what one is looking at. Instead of avoiding detail, they may take the reverse approach of containing so much intricate detail or miniaturization that it eludes looking from a distance, drawing the viewer in. "Such images offer such a proliferation of figures that the viewer perceives the texture as much as the objects imagined" (Marks, 2000, 163). Haptic perception gives precedence to the materiality of the object, while optical perception favors representation. In its touch-like and kinesthetic quality, haptic visuality is more of an embodied sense than is the case with the gaze. In film, video and even photography, haptic visuality is usually a matter of degree, but this is even more relevant in architecture. It is obviously impossible to navigate one's way through a city relying on haptic vision alone, or distinguish the weave of fabric with optical vision. In most processes of seeing there is a constant shifting between the two, back and forth, near to far.

It is a distinguishing characteristic of the haptic, sensuous image that it connects directly to sense perception while bypassing the sensory-motor framework. Sensuous contact with a tactile or especially an olfactory image is "pure affection, prior to any extension into movement" (Marks, 2000). An image such as this may then be integrated into the sensory-motor framework, but does not have to be. In this sense it is a kind of Deleuzian affection-image that lends itself to experience akin to the time-image cinema. The affection-image usually leads into action, but in Deleuzes "any-spaces-whatever", separated from action, can bring about a visceral and emotional reaction. Marks connects optical images more closely with Deleuzes movement-image cinema; an image that leads directly into action, and thus an image tied to an obvious kind of narrative. Her differentiation of the two kinds of viewing

into narrative and non-narrative types does not ring entirely true. They could perhaps be seen as analogous to the musical concepts of melody and harmony. In truth the difference is surely not as clear as this, but one might point out that a narrative experience without the kind of emotional depth Marks writes of is not much of an experience at all.

Haptic architecture does not offer obvious identification with a figure. It encourages a deeper relationship between the viewer and the object. From this it follows that one can not really speak of a pure subject or object of a haptic look; the categories blur, like the image itself. A dynamic intersubjectivity is created between the looker and the image. Contact, not just representation, is a font of sensuous affinity between subject and object or, as the case may be, between two subjects. "Meaning occurs in the physical, sensuous contact between two subjects before, and as well as, it occurs in representation" (Marks, 2000). In this intersubjective mode of seeing one finds an alternate way of achieving convergence between meaning and image, or indeed of imbuing images with meaning. Haptic imagery intrinsically incorporates a way of approaching meaning from the fringes inward. It need not state, as representation does. Instead it can imply, allowing the viewer to actively participate in the unfolding.

"In revaluing haptic visuality I am suggesting that a sensuous response may be elicited without abstraction, through the mimetic relationship between the perceiver and the sensuous object. This relationship does not require an initial separation between perceiver and object that is mediated by representation." (Marks, 2000, 164)

Haptic visuality is hardly something new, just now emerging. It is simply that during the Enlightenment and modernism it suffered somewhat from being relegated to a lower tier of experience. "Sensual abandon" is a phrase from the Enlightenment period that implies that one's senses (with the obvious exception of vision) would, if not reigned in, drag one into an intellectual stupor. Tactile forms of representation have been observed in traditions often erroneously seen as stepping stones in the ever-developing linear history of western art: Egyptian and Islamic painting, textile art and the devil

ornament among others. Marks identifies as haptic such western "high-art" traditions as medieval illuminated manuscripts, Flemish oil painting from the 15th to the 17th centuries, and the surface oriented, decorative rococo arts of 18th century France. "Low-art" such as weaving, embroidery and traditional building have kept their haptic sensibilities alive through the centuries. Haptic visuality is a valid strategy to employ in describing alternative visual traditions, such as African, Native American, Asian and Middle-Eastern art. Not to mention the great mass of historical western art created by women, excluded from the procession of "high-art". Even within modernism itself, cubism stands out as a critical, haptic way of questioning perspectival methods of visual representation.

•

How does one create a space with a haptic character? A liberating distinction to make, and one that opens up a wide range of expression for designers, is that haptic visuality does not exist in any reality outside of momentary experience. An image can have more or less haptic potential and it can embody meaning, but that hapticity is realized only in the interplay between it and the viewer. What this means is that the physical or material authenticity of an object, be it image, sound or smell, does not experientially affect the outcome, nor does any kind of morality. Virtual images, regardless of how they are created, are equal to physical objects in their ability to make meaning manifest. In media such as film this is obvious; its tactility is of an entirely virtual nature. Architects or architectural critics, especially if they have a phenomenological bent, tend not to stress this point. Partly for that reason, purely architectural examples of hapticity will be almost entirely avoided in this text, although I will return to an examination of the general subject in the next chapter. Instead, various other mediums of expression have and will be highlighted in an attempt to talk around architecture, thus describing it without becoming prescriptive. Methods used in audiovisual installations, cinema and staging will work for architecture, though not always with the same level of impact.

Among the most vivid examples of haptic art are the photographic work and video installations of Heli Rekula. Rekula

Heli Rekula, *Landscape no.11 Fenced,* 2000

Heli Rekula, *Landscape no.8 Tired,* 1999

was the winner of the Ars Fennica prize for the year 2002. Her most common subject matter is the female body, and the cultural roles that women play. Themes of innocence and its loss, cleanliness and the unclean recur often. She sees human beings as a very cultural animal, and questions the ways in which culture forms sexuality and aggression. Recently she has shifted more towards landscape pieces, in which she juxtaposes pure, beautiful nature with equally beautiful mountains of trash, accentuating the subject's materiality but making no value judgments. It is these that bear the greater relevance for architecture. In his statement about Rekula for the aforementioned Ars Fennica prize, Robert Storr wrote of the characteristic way in which her work, while very stylish, abruptly makes the viewer aware of the surrounding world. He observed that, following this awakening, a growing anxiety begins to slowly creep up on them: is there any way to reach that vivid, beautiful place, or connect with that person?

The photographs in the series' "Body" and "Landscapes" provoke a direct physical reaction to the pieces, either through a slightly disconcerting excrescent physicality (Excess, 1993), or a barrage of overbearing tactility (Landscape no. 11, Fenced, 2000). The effect is accentuated by the huge size of the pictures, combined with the fact that they are usually presented in a limited space so that backing away from them is made impossible by the proximity of walls. The effect cannot be fully replicated in small scale reproductions. Her video pieces on the other hand sometimes have quite a humble visual component, and a blurry one at that. In "Landscape no. 20, An Tiaracht" (2002) she uses the obvious dissimilarity between the lighting and eery acoustics of the video in concert with those of the physical gallery space, here suddenly very large for such a little projection, to her advantage. The clash is so striking, like a glass of water on the face, that it pushes the viewer out of a default state of physical equilibrium. This weakening of orientation and a slight feeling of vertigo forces the spectator into an embodied mode of experiencing the work. One is somatically transported to the place in the picture while being simultaneously held back from it, never quite getting there. The feeling can be a little disconcerting despite the beauty of the installation, yet liberating at the same time.

Heli Rekula, *Landscape no.20 An Tiaracht,* 2002, 19' DVD

Heli Rekula, *Landscape no.17 An Fharraige,* 2004, 19' DVD

Despite the visual simplicity and sharpness of her photographic pieces, the fact that one is brought so near leads to a kind of loss of control. In their size they block any attempt to grasp the whole. The eye skims along the surface, hopping from place to place, eventually giving up the attempt to focus on any single detail. By shedding one's illusion of control and the feeling of security it brings, the effect of the image is enhanced. A compulsion to give oneself up to the work takes over, even in the case of some of the more disgusting images. Uncertainty can take hold as the feeling of singularity begins to evaporate. Sometimes, if caught off guard by a surprisingly violent transition, the viewer can end up fighting the process reflexively. He/she wavers in and out of the experience, one foot in both worlds, but the images never really force you. They entice you into wanting it. Rekula takes away the underlying certainty one has of one's own physical being, and one eventually melds with the piece. In the case of her video installations it happens in such a total, virtuosic way that the method itself is intriguing. The dreamlike quality of the light in the image of the sea, sky and the island suspended in between conspires together with the subtle soundtrack and the echoing, cool hall (Landscape no. 20, An Tiaracht. 2002). It's like twirling in place for a moment until disorientation sets in, and then being shoved. One never quite hits the ground, though. Sense of place and balance are replaced with a feeling of falling that is exhilarating. The touch is so light that despite its intensity the sensation never becomes oppressive

The Hapticity of Rekula's works is very tangible, the effort required to experience it minimal. They can be tasted and smelled. When entering into "Landscape no. 20, An Tiaracht", the scent of salt on the air is palpable, synethesia seamlessly compensating for the real thing. She uses a whole battery of effects to keep the viewer on his/her toes, constantly off balance. It is almost as though the senses become heightened, perhaps with the help of a small adrenaline rush. The stupor induced by wading through what seems like miles of exhibits can be washed away in an instant. The museum-goer isn't given the option of gazing upon an image from a distance. If anything, the object starts to affect the viewer, takes power over him/her and becomes an agent of action in and of itself. It is a matter of seduction on

the one hand and deceit on the other. You know they're going to get you, you just don't care.

The process does not end there. Both the images of people and the images of landscapes awaken a feeling of otherness. The limits and the nature of haptic visuality make themselves known. We can experience a thing totally, but we can't really know it. Not in the sense of understanding the whole of it. No sense can, not even the combined sensorium, but optic visuality can give us a working facsimile. Haptic visuality by itself will not grant understanding beyond the effect.

Heli Rekula, *Excess*, 2004

2.3 Hapticity in Architecture

Architecture today can largely be read and understood through an acknowledgment of the visual-representational bias of modern western culture. The little disputed dominance of the gazing eye over all other senses has passed beyond liberating thought with the help of abstract representation, and directly into doing its share in impoverishing and restricting experiential variation in architecture. An essential sameness permeates much of our daily environments; they lack texture and detail, the rhythm of compression and expansion, lighting is almost uniformly bland, and micro-climatic differences have been harshly eliminated. This bias is by no means the only contributing factor, but it does play its part. Unimaginative design, short-sighted economical or functional optimization, lack of artistic ambition and many other causes also contribute. Our surroundings turn dull and tiresome, and we have become somewhat numb as a consequence.

A parallel strain of architecture both sensuous and haptic can be found, and has in fact been around for quite a while. In vernacular architecture it lingered through most of the 20th century. Kenneth Frampton and Juhani Pallasmaa have, in their discrete ways, both written on the subject. Frampton is a vocal proponent of what he has named "critical regionalism", an architecture of local context that stands in opposition to what he believes to be the sensationalist international work of deconstructivists like Rem Koolhaas and Frank Gehry. It is a characteristically subtle approach that extracts meaning from culture and tradition without resorting to emulation. Both Frampton and Pallasmaa draw heavily from phenomenology. They consider architects such as Jørn Utzon, Alvar Aalto, Luis Barragan, Steven Holl, Peter Zumthor, and some that are less well-known to be designers of an especially layered and multi-sensory sensibility, somewhat undermining their adopted roles as the opposition underdogs in the process.

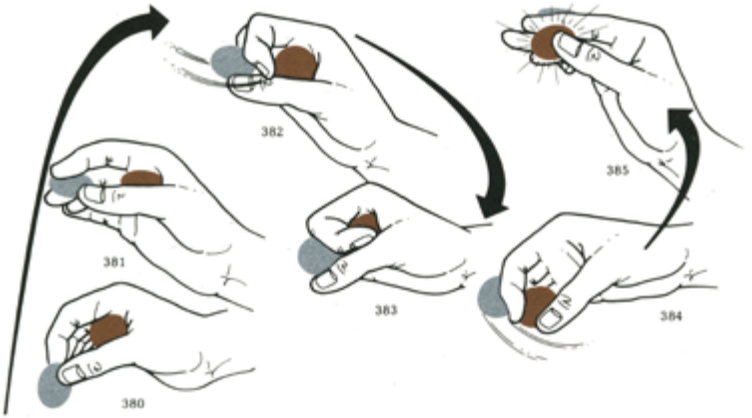
In his essay "Hapticity and Time", Pallasmaa critiques what is essentially white, modernist space in which the "…modernist surface is treated as an abstract boundary or volume, and has a conceptual rather than sensory essence. These surfaces tend to remain mute, as shape and volume are given priority; form is vocal,

Lincoln's Inn Fields, view of the Dome area looking east

whereas matter remains mute" (2000, 78). He believes this prevalent approach divorces us from the experience of time and reality, and therefore causality. Much of contemporary architecture is to him a doomed and unseemly attempt to resist the forces of time. He follows with a short anecdote of John Soane:"While engaged in the construction of his own house in Lincoln's Inn Fields… John Soane imagined his structure as a ruin by writing a fictitious study of a future antiquarian" (Pallasmaa, 2000, 79). To a certain extent it is true that modernist space has, in its sometime aspiration for perfection, assumed a utopian stance inherently denying the potential for change, change that is ultimately the defining characteristic of life, and the dramatic narratives and emotions that give it meaning. Soane's undertaking does not strike me in the way it does Pallasmaa. It can be viewed as a description of a different but equal attempt at control over time. Not a denial of it, but an assumption that it can be tamed to suit a particular aesthetic in an outdoor museum kind of way, no more open to layering and cultural reinterpretation than purist geometrical abstraction. Architecture surely does become more haptic as it ages and dies, or undergoes a sea change into something quite different. The effect is slower than it is for media such as film, but we see paint fade and peel, rot set in, metal tarnish and foundations crack. Some effects are more pleasurable to watch than others, but haptic intensity does not go hand in hand with subjective preference or taste.

To Pallasmaa material has a language of its own. It is almost as if to him materials, and the weakness of form that brings them to the fore, are the only source of haptic effects. As though only physical, structured surfaces that can actually be rubbed and scratched with the hands can be visually tactile. His concept of tactility is a somewhat romanticized and archaic one, not to mention selective:

"Stone speaks of its distant geological origins, its durability and inherent symbolism of permanence; brick makes one think of earth or fire, gravity and the ageless traditions of construction; bronze evokes the extreme heat of its manufacture; the ancient processes of casting and the passage of time as measured in its patina. Wood speaks of its two existences and time scales; its first life as a growing tree and the second as a human artifact made by the caring hand



[*Technique*]

[*Effect*]

of a carpenter or cabinetmaker. These are all materials and surfaces that speak pleasurably of time." (Pallasmaa, 2000, 79)

•

Visual tactility need have little to do with physical texture at all, and is certainly not restricted to a selectively aesthetized group of materials. Images of vinyl and fiberglass and greasy Styrofoam have just as much haptic potential as the ancient building materials and methods that Pallasmaa is drawn to. More to the point, visual tactility pared down to its essence is simply a matter of the way "the eye is compelled to "touch" an object" (Marks, 2000, 173). Traditional building methods or manipulating, warping or destroying a surface or image in some way does not automatically give rise to a tactile result, though it may. Another way to approach a haptic effect is to make detail excruciatingly small or images and ornament so profuse that they compel a viewer to move close while simultaneously multiplying the points of visual contact, inhibiting identification with the objects. In this way, what essentially amount to the same thing as high resolution images "seem to contain more visual texture than the eye can comprehend" and "have the effect of overwhelming vision and spilling into other sense perceptions" (Marks, 2000, 175). In environments already incorporating elements of sound and movement, haptic imagery can further accentuate the embodied multisensory relationship to the surroundings.

Ideally, one would adopt a critical yet open attitude towards the creation of intensive, multisensory spaces. One that is grounded in the cultural reality/realities that one does inhabit, rather than that which one wishes to. It's the only realistic option if one wishes the user to engage with the result. There is then no right or wrong mechanism for giving that intensity expression, no true path of any kind. The effect is the real trick, the performance. How it is brought forth is just technique. One should just grab whatever is at hand, use everything and anything at one's disposal to come as close to the desired effect as possible.

In contrast, Pallasmaa is heavily influenced by his grounding in phenomenology and slightly uncritical of it. It does not come without baggage, bringing a metaphysical taint along

Olafur Eliasson, *The Weather Project,* 2003

for the ride. His writing conveys a quest for an inherent truth in architecture and a want for something to be revealed through haptic vision, something fundamentally true and meaningful that should and will be pleasing. One need not share his sentiment, nor agree with his call for humility. Neither is a required component of intense spatial experience. I believe that when he writes of humility he really means, or ought to mean, subtlety; the ability to take small, insignificant, ordinary things and, by re-rendering them haptically, wring touching, unfamiliar beauty out of them. He presents sweeping condemnations like: "The architecture of modernity… has become too consciously engaged with aesthetic effects and qualities" (Pallasmaa, 2000, 82). Yet in his writing he projects his own personal, highly consistent aesthetic preferences: archaic materials, the form of picturesque ruins, nature and traditional Japanese art and construction. His partiality is so strong that, intentionally or not, it rumbles its way to the foreground. The form of his text overshadows what I take to be his actual message of depth and relevance in architecture, and makes his thinking seem inapplicable in most contemporary urban spatial projects. The virtual, temporary and illusionary are equally real, equally valuable in creating an effect as the physical and permanent. Inside the moment there is no difference. Even blatant lies and misdirection have their uses in a spatial narrative. His concept of time, too, goes only one way. Time for him would seem to begin where the present ends.

Collage and assemblage, according to both Pallasmaa and Marks, lend themselves well to a haptic architecture;"these media enable an archaeological density and a non-linear narrative through the juxtaposition of fragmented images deriving from irreconcilable origins" (Pallasmaa, 2000, 79). A collection of objects bringing the past to us via embodiment enables us to experience time. Like collage art, haptic architecture is by definition incapable of achieving visual plenitude. Rather it offers the viewer a chance to engage with memory, cutting off any easy access to a predefined narrative. Compare this open ended subtlety with the tendency of modernist and especially postmodernist architecture to simply make statements, symbols and representations. When describing haptic architecture Pallasmaa coins the term "fragile architecture" (2000,








80), a misleading expression that he himself goes on to describe as an "architecture of weak structure and image" that is "contextual and responsive". The haptic image, vague in from, can still be very powerful. It can be shocking and at times even traumatic in its ability to stimulate horrific memories as well as happy ones, but it also contains the potential for protection. "As fetishes protect their memories, haptic images can protect the viewer from the image, or the image from the viewer" (Marks, 2000, 177).

•

The Arabia School in Helsinki, just a few miles from the city center, was the first pilot school in the InnoArch research project. It has quite a long and colorful history, having been many things including a homeless shelter before becoming what it is today. The decision was made to convert it into a school that incorporates grades one through nine. The renovations were completed in 2003. From its current look, it can be safely extrapolated that at some point in the design process, most likely at the very beginning, a collective decision was made not just to convert to a new use, but to construct a new building around the old skeleton, leaving absolutely no traces of its colorful past. Walking through the school now, one has no inkling that it was ever anything else. The surfaces have all been redone, walls and staircases have been moved around, and ceilings have been lowered to make space for climate control systems and so on. The new design contains some dramatic narrative elements, like exterior staircases that give a strong impression of horizontal compression and lift leading into the upper lobbies, but nothing ties into the history of the building or locality.

In its current state, it represents an almost tragic missed opportunity for a layered and subtle, culturally relevant architecture. The building must have just shouted out for commentary on the lives of the people that fall through the cracks, and the changing urban environment that they have been shuffled out of. Buildings are repositories of political memory, but one should not be fooled into thinking they cannot be papered over. I do not, however presume to judge the politics of the matter, but am simply pointing out a missed architectural opportunity. It was a chance to create

something relevant stemming from a difficult subject, one which would have opened up over time to the people that inhabit it. A building could not conceptually be much better suited to a critical design that does not preach, but insinuates. The ways of realizing a layered approach are practically infinite, suited to any aesthetic. Perhaps the designers and clients were misled by the roughness of the place. Pallasmaa writes: "It is indeed thought-provoking, that architectural settings which layer contradictory ingredients project a special charm. Often the most enjoyable museum, office or residential space is that which is fitted into a recycled building" (2000, 80). Assuming of course that something is left of the original building, and parts of it have been left un-plasterboarded. "Charm" is not the best choice of words. It points to the friendly, to the quaint.

There is nothing wrong with the design of the Arabia School building as such. The new elements work relatively well and the users seem very satisfied with their lot, but a lost opportunity it is all the same. A very modernist approach was taken, the old was swept away and room was made for well defined new functions. It is a simple fact of the culture of architectural practice that architects feel exceedingly comfortable in defining "functions" for spaces, while abjectly recoiling from the idea of controlling the end users through a narrative. The narrative in architecture is ubiquitous, but inherently weak compared to almost any other kind in the amount of control that it can exert. Planning for function can, while essentially a good thing, be far more restrictive of the use that a space can be put to. Also, the perceived competence that designers have for it is often illusory and dated. It seems presumptuous to think that it is enough to design in such a way, when sustainability and adaptability are required of every building. When aiming for adaptable buildings, it seems backwards to try to plan for every eventuality or to define the functions of the future, but this is what we mostly do.

I propose another way to approach sustainability and adaptability that does not require a total destruction of what came before, and suggest making room for a more subtle approach. What Pallasmaa writes of the charm of recycled buildings is mostly true, and so one can begin from the following premise; if we take as

our goal the designing of buildings that have a seductive intensity to them, people will adopt them as their own. Adaptability is accentuated by the level of effort and discomfort or idiosyncrasies that inhabitants are willing to put up with for something they are drawn to, and would be further served through unrestrictive, open-ended design that leaves space for functions but does not restrict them to the extent that most contemporary design does. The use of augmented reality is already possible to a certain extent, and will become more and more ubiquitous. If the physical frame of the building is capable of incorporating it, or has been designed to do so with the minimum of effort, both function and spatial intensity can be enhanced and focused to the level required. What is now possible in semi-complex spatial installations such as those created by the New York and Los Angeles based Imaginary Forces is becoming possible in almost any space.

Architecture incorporating haptic effects of any kind contains an inkling of seeing for the first time, as one allows oneself to gradually enter deeper into the effect rather than knowing it on contact. At first the viewer may be unsure of what he or she is seeing, and can choose between quickly forcing the image to become understandable in some way, or of testing it by approaching it and moving away again, trying to gain something from it that is not immediately apparent to the gaze. Haptic visuality requires of the viewer a certain level of trust. One gives up the safety of a dominating stance, believing that the object of vision is not menacing and can be looked at in one's own time. Whether architecture is perceived as haptic is a function of the viewer as much as the object. Factors such as the subject's cultural background may contribute to their willingness or capacity for haptic experience. Architecture, unlike cinema, already contains a necessary haptic dimension of its own in the form of anticipated and peripheral vision; everything seen but beyond the immediate sphere of focus. The spatial intensity created through these means can drastically affect how spatiality is experienced. If done in a controlled way, one can alter the nature of the space by altering an effect; and find a divergent route to achieving the adaptability of spaces.

"Haptic visuality requires the viewer to work to constitute the image, to bring it forth from latency" (Marks, 2000, 183). It is

an act of viewing in which subject and object together constitute vision, constructing an intersubjective relationship between beholder and image. The viewer gives up power to the image, gives up separateness and dominance in order to merge with it; "… not to know it, but to give herself up to her desire for it" (Marks, 2000, 183). It is a very sensual kind of looking and very reminiscent of physical desire in that haptic visuality is also a matter of something constantly slipping away, remaining always just a little out of reach. In this sense it is a state of never really "knowing" that enables a constant reinterpretation, the complete opposite of the static mastery characteristic of optical visuality.

2.4 Mimesis and Tactile Epistemology

(From the Greek *mīmēsis*, from *mīmeisthai* "to imitate", from *mīmos* "mime")

For tactile epistemologies, knowledge is something achieved through direct physical contact, not through vision. It should be mentioned that many tactile epistemologies have what appears to be a doubtful or unrigorous provenance. Some are whimsical, sometimes aiming more for poetic effect than true applicability. Among these is the anthropological longing for the exotic ways of knowing of foreign cultures. On the other side of the scale rests the visualcentrism of modern western culture. Since classical Greek thought, certainty has been based on vision and visibility, as demonstrated by the Platonian concept of the "minds eye". The Renaissance borrowed from its cosmological hierarchy a parallel ranking for the senses: highest is sight for light, hearing for air, smell to vapor, taste to water and, finally, touch for earth, lowest of all. In truth, sight is in some respects relatively easy to fool when compared to hearing or touch. One is constantly seeing things that are not there. Only a fraction of what is "seen" at any given moment is perception. The rest is filled in by memory, or the brain takes an educated guess. The composite image is very convincing but no more true. The ear can also lead us astray, but with the advent of digital media, we have noticed that it is actually much harder to convince than the eye. Possibly we are duped by the apparent ease of visual recall that lends vision its undeniable abstraction. Recalling touch is a different matter altogether. Consider however the ability of the other senses, residing lower in the hierarchy, to instigate involuntary recall and the power that comes with it. Proust's anecdote of drowning in memories at smelling the scent of a Madeleine pastry is a classic literary example.

As its root suggests, mimesis means representing a thing by taking on its characteristics, and is the foundation for tactile epistemology. "Mimesis is thus a form of representation based on a particular, material contact at a particular moment, such as that between a child at play and an airplane" (Marks, 2000, 138). It is an almost osmotic way of learning in that one does not utilize

Small boy mimicking nanny

any symbolic form of representation. Knowledge appears to pass kinesthetically from object to muscle through the combined senses. Mimesis is a form of yielding to one's environs, rather than controlling them. Walter Benjamin observed the ability of children to relate to things mimetically, also suspecting that the mimetic relationship does not necessarily have to be superseded by a grown-up way of relating to things as mere objects. A hint of this can be gleaned in such pursuits as dancing, whose original function can still be observed in some of the aforementioned exotic cultures. In the Western world the ascendancy of symbolic representation has gradually eaten away the devalued mimetic faculty. Among other things, this resulted in the inability of Europeans to recognize it in other peoples during the colonial era, a contributing factor to some of the partly unintentional cultural damage that followed.

Mimesis is a way of gaining a deeper understanding of our world, and of transforming our relationship to it from residential into a participatory one, from being in the world into being of the world. It need not be a regression into a lower state. It is more like a reintegration of useful methods into a new aggregate. In mimesis, the hierarchical power structures between subject and object are reorganized. As in haptic visuality, the division between the two disintegrates, and their qualities shift. The subject takes on physical, material attributes of the object, while the latter takes on the active character of the subject. Mimesis is a way of being in the world through empathic involvement rather than abstraction. Not all tactile epistemologies insist on return to a state before language and before representation. They are, however, all clear on the fact that symbolic representation is not the sole source of meaning. Symbolic representation itself can be said to derive from a more primal relationship to the environment; language originates in the body. Mimesis is not, then, a primitive state that one can regress to, but rather the starting point for an additional, cultivated epistemology.

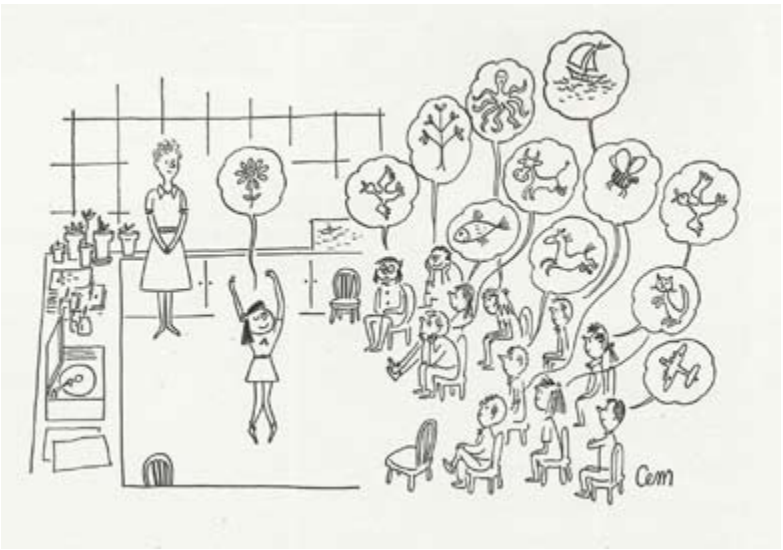
From another angle, mimesis is tied into the feeling of alienation common to the modern man or woman. Perception functions as a sort of shield, protecting the body from experience, rather than permitting the senses to flood the body. The dominance of the eye has molded our surrounding after its own specifications

and now, as we attempt to regain our senses, the environment itself would seem to be an obstacle in our path. It is here that common ground can be found with architectural thinkers such as Pallasmaa and Holl, they borrowing in turn from Merleau-Ponty, Heidegger, Foucault and Derrida.

"The gradually growing hegemony of the eye seems to be parallel with the development of Western ego-consciousness and the gradually increasing separation of the self and the world; vision separates us from the world whereas the other senses unite us with it. Artistic expression is engaged with pre-verbal meanings of the world, meanings that are incorporated and lived rather than simply intellectually understood." (Pallasmaa, 2005, 25)

Theorist such as Pallasmaa, calling for a return to sensory architecture, often imply (or state) that sense experience is something prediscursive or natural. Phenomenological thinkers invoke the senses' biological functions in serving fundamental human needs of shelter, nourishment, safety and sociability, rarely acknowledging the fact that sensuous knowledge is cultivated. This may be due to the skewed perspective that one has in Eurocentric cultures. One is so used to the other senses being of little or no account that one cannot identify it in other cultures. Among these I count the proliferation of subcultures that are not geographically remote, but so removed from one's own habitual world that they appear as completely alien and therefore threatening. "Although much of sensory experience is presymbolic, it is still cultivated, that is, learned, at the level of the body" (Marks, 2000, 145). Therein comes the will to find culture within the body, not some "untamed", uncultured experience. Embodied experience is already informed by culture, be it a culture that denies it or one that fosters it. When this is understood, one can begin to explore the area of sensory knowledge that truly is precultural, and therefore common to all human (spatial) experience.

Tactile epistemology is a matter of thinking by "touching", or more precisely, of giving equal weight to the physical presence and feel of another as one gives to the cognitive processes of symbolization. Not a regression, but a purposeful awareness of the perceiving body. Haptic spaces, by manifesting as physical objects



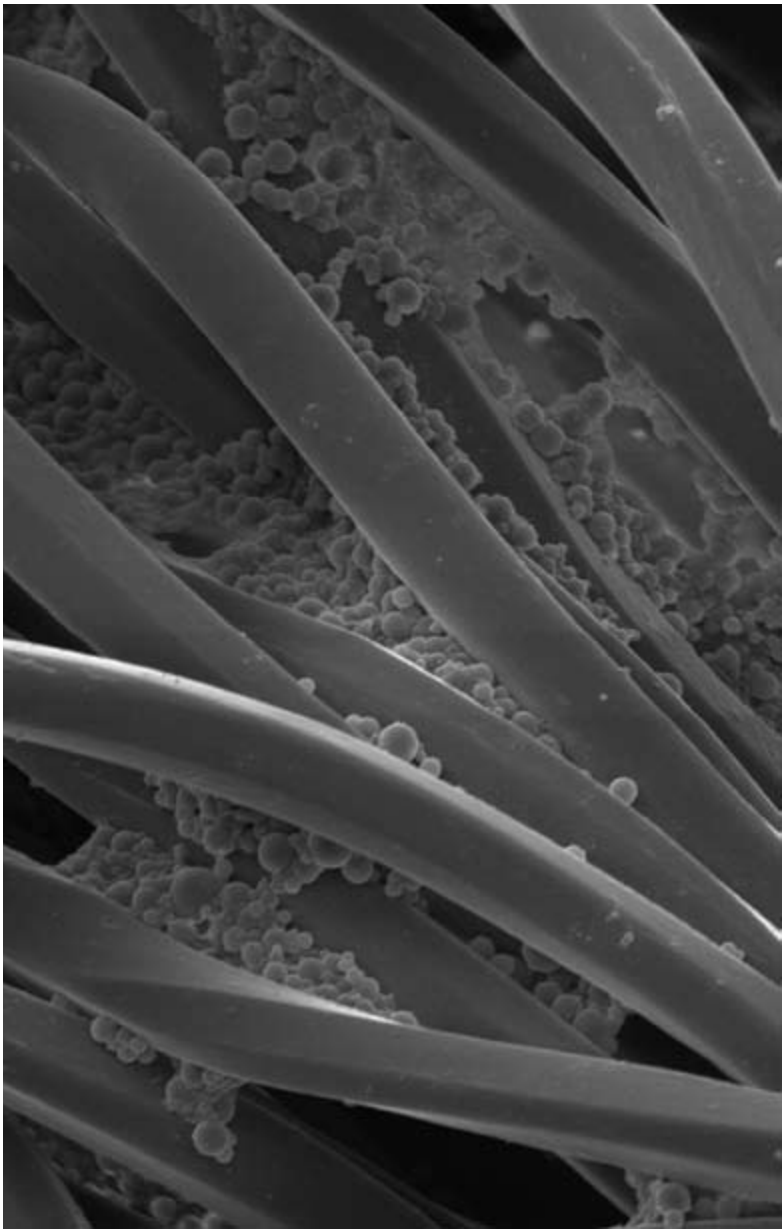
with which we interact rather than a symbolic representation in which we insert ourselves, stimulates this kind of embodied mimetic intelligence. One is then free to shift between the optical and haptical ways of seeing, to compare and analyze different ways of being with an object. The point of tactile visuality is not to substitute optical sensations with the tactile, but to give other knowledge, and perhaps most importantly, to point to the limits of sensory knowledge. By galvanizing one form of sensory perception after another, an image shows its own, lacking and oblique relation to the real.

2.5 Metamorphic Sensoria

The organization of the senses, the sensorium, varies individually as well as culturally. The architecture, or more comprehensively the total environment of a given region, represents the sensorial organization of that regions culture. For some cultural memories, the sensorium is the only place in which it is stored; sensory experience is therefore at the very core of cultural memory. None of this is of any value in understanding architecture or urbanism unless we recognize the fact that our spatial experience already is multisensory. Of course, in any given setting, there are more sensoria at work than just the one. Immigrants for example usually inhabit at least two, that of their country (culture) of origin and that of whatever place they now happen to find themselves in.

In most cultures the visual sense is preeminent, but not always by as great a margin as in the postindustrial metropolis. The extravisual frequently entails an appeal to those cultures that do cultivate the proximal senses. However, despite whatever intentions one might have to do so, it is not an easy thing to adopt a temporally or geographically alien sensorium, and be carried away by a torrent of new sensations. Sense knowledge is firmly rooted in culture. One of the ambitions of this text is to provoke the reader to seek out the dormant and less obvious sensory abilities that already exist in one's own culture, in an undercurrent running alongside the more prestigious distance knowledges. I believe this to be a more satisfying, productive and far less disruptive approach than attempting to appropriate these abilities in an ungainly way from distant civilizations.

To understand how the senses encode culture, one must examine how the process is realized in the body. All senses are conveyors of memory, and one's body encodes memory in senses in many different ways. In addition, it should be noted that the use of the senses is not a biological given but learned (Marks, 2000). Perception is plastic. It morphs and distorts, forms and reforms according to the changes in culture and individual needs. Henri Bergson advanced just such a plastic model of perception that provides a way to understand a plethora of feasible organizations of sense memory. For him, some perceptions are more immediate



EURACLI microcapsules for delayed-release substances; can carry e.g. perfume

than others; smell, taste and touch are seen as closely bound with the body. Sight and sound provide more room to maneuver, a "zone of indetermination" (Marks, 2000), in which memory can mediate experience. It is, again, a matter of degree. In all sense perception, the intervention of memory is both possible and necessary.

Consider the sense of smell. It is the sense that resists idealization more than any other. Smell can really only be sensed in an engagement between the chemical and the human body. While the so called "lower animals" have strong hardwired genetic coding for the scents of sex, death, danger and food, humans, mostly, do not. The specific physiology of the human brain gives us instead the capacity to learn highly contextual responses to smell. Along various points during fetal development and infancy, centers in the brain that are able to process different kinds of information develop. The proximal senses are of high importance to the lower animals. Babies, too, can identify their mothers long before they can recognize them or other people visually. Children learn by smelling, touching and tasting. The distance senses of vision and hearing are the more advanced in the higher animals, and also develop as a human matures. The cortex, the youngest and arguably the most evolved part of the brain (in comparison to lower animals) handles cognition. Conversely the noncognitive hypothalamus is the oldest part of the brain in both the evolutionary and individual sense. The hypothalamus along with other parts of the limbic system (especially the amygdalae, located deep in the medial temporal lobes) deals with memory and emotion. The sense of smell is unique among the senses in that it is the only one with a neural pathway leading directly to the hypothalamus; olfaction is the only sense with a strong fundamentally noncognitive component. However, another neural pathway leads directly from the nose to the cortex. This would imply that smell can directly awaken memory at the same time as it is cognitively processed. Smell enables one to recreate the past in our own bodies. It can awaken memories that may not be accessible in any way, but ones that we cannot control, either. Such memories can be overwhelming. Touch has a similar, slightly less potent link to the limbic system, suggesting that it has an analogous, if weaker connection to memory (Bear, Connors & Paradiso, 2001). This is why memories aroused by smell seem so strong and linger so much

longer than visual or aural memories. Yet smells are so very difficult to visualize or put into words; odors are easy to identify through mnemonic association, but difficult to verbalize. One begins by responding to a smell emotionally, and only then gives it a name. We process smell both cognitively and precognitively, which would seem to imply that emotional responses to smell are learned. We aren't born loving the smell of freshly baked blueberry pie, we learn to.

•

Sense perception, then, is like other mental abilities, is reinforced by use, and must be built up by repeated practice. We have the potential for great variation in the way we use and prioritize our senses. "Cooks have stronger synaptic connections between the sensorimotor cortex and tongue than and nasal receptors than the average person. Violinists are found to have a larger cortical representation of the fingers of the left hand than are (presumably right-handed) nonstring players" (Marks, 2000, 202). The somatotopic representation of the different parts of the body in the cortex has been elucidated in the form of the homunculus (Latin, for "little man") (Jasper & Penfield, [1954] 1985).In addition to the variation displayed between individuals, several studies of the sensorium suggest that cultural differences also affect the way the nervous system organises the senses. Walter Ong has pointed out that a given culture will teach one to specialize one's sensorium in specific ways by focusing our attention to some types of perception more than others. "Given sufficient knowledge of the sensorium exploited within a specific culture, one could possibly define the culture as a whole in virtually all its aspects" (Ong, [1967] 1991, 28].

When Ong and Marks write of the cultural aspects of sensoria, they mostly mean national or tribal cultures and their amalgams. For architectural purposes, microcultural, regional and local differences are equally if not more compelling, and require a multitude of varied design approaches. Architects and designers too have their own peculiarly specialized sensorium, as demonstrated by their ability to orient themselves, think spatially and be slightly

more attuned to materiality and acoustics than the layperson. The difficulties of communicating the experience of a microculture to a person outside of it become obvious. Again: it is not anything as simple as a matter of aesthetic preference. It is not that the nonarchitect does not understand what the designer wishes to communicate, but that his or her sensory perception may not be similarly attuned. The differences should mostly be negligible, however; the musician can still appreciate food, the cook may enjoy the occasional concert, and both are enveloped by the same general cultural environment.

Since Ong made his observation, a number of anthropologists have begun to devote themselves to documenting different cultures according to the organisation of their sensorium. They have a amassed a fascinating body of work that increases the understanding of the prodigious spectrum of perception that the body is capable of, and the survival, ritual, customary, aesthetic and other purposes that inform human sensoria. Some of them, however, mistakenly argue from a primitivist position of longing for the sense knowledge of another culture, as do some architectural writers. They are in error when attributing sensual experience only to the non-western and children, and the assumption that only certain objects or materials are bearers of history. In addition, given the current blends and amalgamations of cultures in most societies, it is important to acknowledge that the overlap between individual and any given cultural sensorium will always be uneven. This may result in differences between an individual's sensorium or sensory wiring informed by culture, and the sensuous geography in a given place. Even within visual-dominant cultures, there will always be differences in how people engage sensuously with objects of any kind. One should take different sensoria into account, but avoid restrictive descriptions of any given cultures sensuous engagement with the world. All sensoria are in a constant state of flux.

Conclusion

Conclusion – Recognize and Utilize

We have come to the end of a brief, but at times complex, analysis of the components of spatial experience, of how they embody cultural memories and how those memories can then be brought forth, and the mechanisms by which they are transmitted to the viewer. I have concentrated on aspects of architecture and urbanism, and their inherent potential for different kinds of narratives, that I myself find interesting, but which have perhaps not gained the rigorous and grounded study that they merit. I have done this in an undeniably eclectic manner. I have borrowed from the fields of media studies, philosophy and contemporary art that are intentionally non-metaphysical, and grounded in the contemporary culture of the times, in order to offer a slightly different and more pragmatic explanation for the origins of meaning in our environment than the phenomenological school so prevalent in architectural discourse since the 1970s.

Upon reading this text, the source of memory has moved continually further from the image-space itself and closer to the body, while power and action have moved from body to image-space. With each step away from symbolic representation, the grasping of memory seems to become more complex, more difficult. I hope that I have successfully shown that the emotional impact of memory is inversely related to the ease of its awakening. More than that, I hope to have been able to convince the reader that there exists a vast multitude of memories that only gain their expression, directly or indirectly, through the non-audiovisual senses, and that coaxing, teasing, seducing, forcing, and using whatever other means we have at our disposal to bring these compressed cultural meanings to the fore are ultimately worth the effort. In addition, I have attempted to shed light on a holistic and rounded way of understanding how the human body truly perceives its environment. My reasons for mostly avoiding purely architectural methods of exposing these imprinted meanings is twofold; firstly, I believe that by proposing methods or showing examples from within the discipline, I would unduly restrict the readers and my own thinking on the subject to dated, ponderous, established practices; secondly, I believe that methods suitable for architectural application can be inferred from

the film, audio and media-art projects that I have presented. Better by far to start from an adventurous and uninhibited base and work from there.

Cultural sensoria are born and continue to morph and move around as heterogeneous cultures meld and spawn. The traditional, one might say cynical way of looking at the development of cultural hybrids, is that commodification and globalization will homogenize and dampen out all sensuous experience attributable to cultural difference. It is a viewpoint that has a beguiling, defeatist seductiveness to it, and a part of sensuous experience is indeed becoming increasingly universal and placeless. Malls, airports, stadiums; generic places are certainly proliferating and would seem to incorporate their own sensory organizations. Their new sensory world is increasingly visual, more specifically symbolic, but it also entails a commodification of other sense modalities. Vision and sound are by far the easiest sense to control and package into signs, but all the senses are susceptible to the process. Consider the differences between the aural environment of a forest or field, even a house in the country, and the electronic sounds of elevators, beeping traffic lights, sirens, music and muzak that pervade the urban landscape. The difference is obvious, even if its meaning is not. The multisensory cityscape is subject to more control specifically, on the level of individual outputs, but greater chaos generally than any remotely "natural" environment.

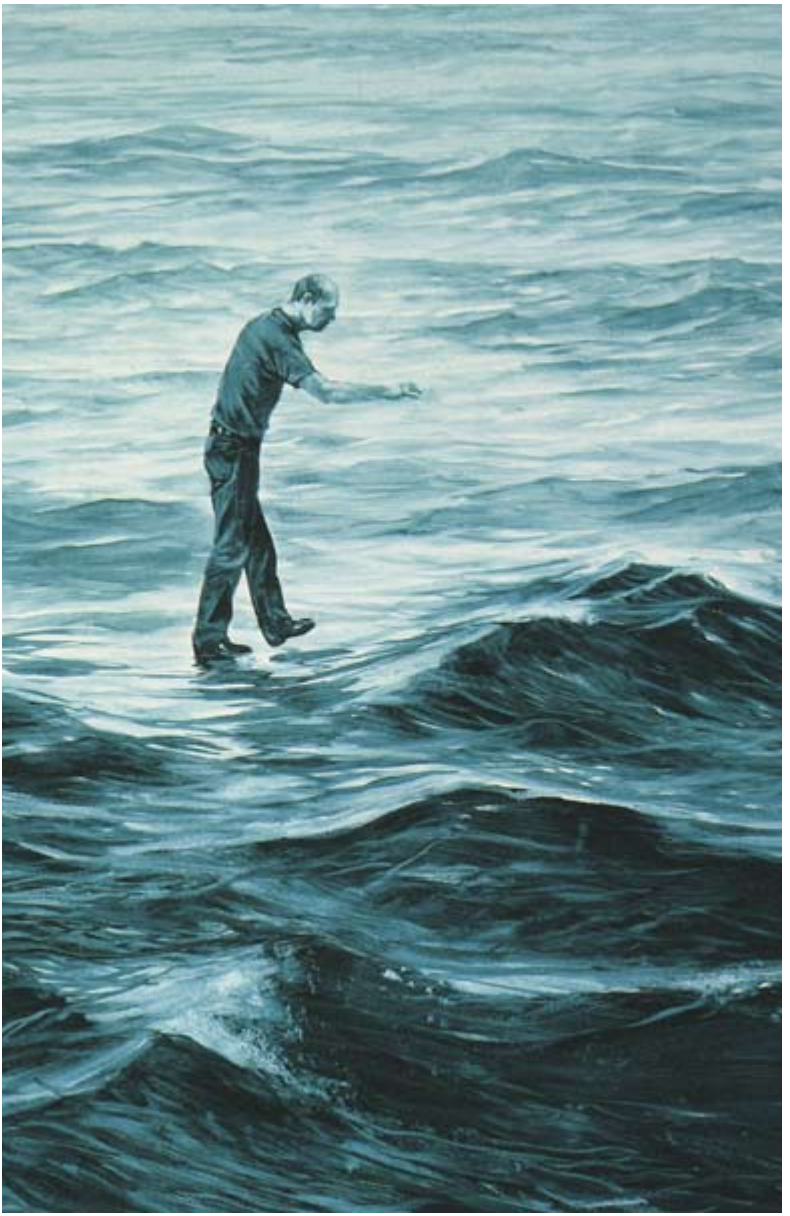
Even smell, arguably the most emotionally powerful of senses, has long since been appropriated by commerce, purged from its fleshy origins of glandular secretion, and been re-presented in packaged form. Scents of cinnamon apple are sprayed in new apartments to achieve a sense of familial coziness while others are used in an attempt to stimulate office workers, not to mention all the scents that revolve around the customization of one's own personal odor. As smells are increasingly synthesized and marketed, the indexical link that they once had to their place of origin is weakened until, eventually, it may be severed. The ubiquitous aerosol cans of air fresheners are a kitschy but prevalent example, the smells of "Summer Meadow" or "Citrus Fruit" now wafting around in the toilets of the world. Marks argues that when a scent is separated from its source, it becomes a simulacrum, or a scent

of a nonplace, but I find I do not agree with what I see as her dramatic generalization. The accumulation of layered meanings is more complex than that.

Sometimes a generic sense experience does muscle out a local one. This has happened with much of global cuisine, local tastes being patiently edged out by commodified international products, but it is difficult to view this as an entirely negative thing, however much one tries to awaken one's sense of outrage. While some experiences do fade, others are born. The fact that a staggering array of new experiences is at our fingertips is an expression of the cultural changes we have gone through to be where we are now. After all, cultural change is not a new thing, either. In Vallila, Helsinki, there is an old Meira coffee factory that still exudes its freshly roasted aroma throughout the locality. This olfactory effect, while old today, is certainly by no means indigenous to Helsinki. It is an example of a sensuous experience that has become both global and local, but to a great number of places over the centuries, old and new. The spread of a scent does not necessarily strip it of its originary connections and meanings. The new need not always destroy the old.

Such sense memories are changed into places within what Marks dubs "nonplaces", combating the perceived world of increasingly homogenized sensory experience. They are eddies and pools of regional sensuous experience, constantly changing, in the greater current of commodified and generalized sensory experience. As people shift and move, their sensory practices move with them in their cooking, music, and ritual, and around them new sensuous geographies are created by grocery stores and markets, that retain an essence of their place of origin, perhaps creating a hybrid of the old and the new. They bring sensory experience in their bodies, too, in their own, uniquely organized sensoria, through which they perceive their new environments in a way that can be very unlike that of the more indigenous inhabitants. The effect in pronounced in urban metropolises, illusions of mass culture comprised of a blizzard of microcultures, many of which are completely invisible to the outside.

What I advocate, then, is that spatial designers recognize the potential of the metamorphic sensorium. There can be no



detail of
Mark Tansey, *Myth of Depth,* 1984, oil on canvas

reason for critical architecture and urbanism to neglect to use powerful tools that are within their grasp. No further technological advancement is required to make full use of the varied mechanisms of human perception. The designer need only open his eyes to a literally different way of viewing the world. Upon acquainting him or herself with its variety, he or she is then free to utilize a newly-found, pragmatically multisensory understanding of our culturally informed spatial environments in the creation of new stories, with strange, new fragrances and curious textures.

Bibliography

Azuma, R. 1997. "A Survey of Augmented Reality." *Presence: Teleoperators and Virtual Environments 6.* 4/1997. 355-385.

Bear, M, and Connors, W with Paradiso, M. 2001. *Neuroscience – Exploring the Brain*. Philadelphia: Lippincott Williams & Wilkins.

Benjamin, Walter. 1968. "The Work of Art in the Age of Mechanical Reproduction." *Illuminations*. Trans. Harry Zohn. New York: Schocken. 217-252.

Bergson, Henri. [1912]. 1988.. *Matter and Memory.* Trans. Nancy Margaret Paul and W. Scott Palmer. New York: Zone.

Berman, Marshall. 1982. *All That Is Solid Melts Into Air – The Experience of Modernity.* New York: Penguin Books.

Deleuze, Gilles. 1986. *Cinema 1.* Trans. Hugh Tomlinson and Barbara Habberjam. New York: Continuum.

Deleuze, Gilles. 1989. *Cinema 2.* Trans. Hugh Tomlinson and Robert Galeta. New York: Continuum.

Foucault, Michel. 1970. *The Order of Things.* New York: Routledge.

Frampton, Kenneth. 1989. "Kriittisestä regionalismista." *Modernismi – Historismi.* Hanko: Hangon Kirjapaino Oy. 176-125.

Holl, Stephen. 2000. *Parallax*. Basel: Birkhäuser.

Jasper, Herbert and Penfield, Wilder. [1954] 1985. *Epilepsy and the Functional Anatomy of the Human Brain*. Philadelphia: Lippincott Williams & Wilkins.

Leach, Neil. 2006. *Camouflage.* Cambridge: MIT Press.

Malnar, Joy Monice, and Vodvarka, Frank. 2004. *Sensory Design.* Minneapolis: University of Minnesota Press.

Malnar, Joy Monice, and Vodvarka, Frank.1992. *The Interior Dimension – A Theoretical Approach to Enclosed Space.* New York: Van Nostrand Reinhold.

Marks, Laura U. 2000. *The Skin of the Film – Intercultural Cinema, Embodiment, and the Senses.* Durham: Duke University Press.

Marks, Laura U. 2002. *Touch – Sensuous Theory and Multisensory Media.* Minneapolis: University of Minnesota Press.

Merleau-Ponty, Maurice. [1945] 2002. *Phenomenology of Perception.* Trans. Colin Smith. London: Routledge.

Norberg-Schultz, Christian. 1975. Meaning in Western Architecture. New York: Rizzoli International Publications Inc.

Norberg-Schultz, Christian. 1980. *Genius Loci -, Towards a Phenomenology of Architecture*. New York: Rizzoli International Publications Inc.

Ong, Walter. [1967] 1991. "The Shifting Sensorium." In Howes, *Varieties of Sensory Experience*. Toronto: University of Toronto Press. 25-30.

Pallasmaa, Juhani. 1995. "Ihmisen paikka – Aika, muisti ja hiljaisuus arkkitehtuuri-kokemuksessa." *Ympäristö arkkitehtuuri estetiikka.* Edit. Arto Haapala, Martti Honkanen and Veikko Rantala. Helsinki: Yliopistopaino. 178-194

Pallasmaa, Juhani. 2000. "Hapticity and Time." *The Architectural Review*. 5/ 2000. 78-84.

Pallasmaa, Juhani. 2001. *The Architecture of Image – Existential Space in Cinema*. Hämeenlinna: Kirjapaino Karisto Oy.

Pallasmaa, Juhani. 2005. *The Eyes of the Skin – Architecture and the Senses.* Chichester: Wiley-Academy.

Peirce, Charles Sanders. [1892] 1992, "Man's Glassy Essence." *The Essential Peirce – Volume 1*. Bloomington: Indiana University Press.

Venturi, Robert. 1966. *Complexity and Contradiction in Architecture*. New York: The Museum of Modern Art Press.

Venturi, Robert and Scott-Brown, Denise with Izenour, Stephen. 1972. *Learning from Las Vegas*. Cambridge: MIT Press

List of Illustrations

p.86 Joseph Michael Gandy, view of Dome area in Lincoln's Inn Fields, 18, watercolour

p.88 Sol Stone, *"One Hand Triple Spellbound No.2"*, from Richard Kaufman's *Coinmagic* (New York, 1981), p. 105

p.88 Picture of Jimmy "Cards" Molinari, time and place unknown

p.90 Olafur Eliasson, *The Weather Project* in the Tate Modern, 2003

p.92 Arabia School in Helsinki, spring 2008

p.98 Leonard McCombe, *Minor Mime,* date unknown

p.101 CEM, in the *New Yorker,* 1961

p.104 Picture of EURACLI delayed release microcapsules, 2006

p.108 Wolfgang Tillmans, detail of *Nocturne,* 2000

p.114 Mark Tansey, detail of *Myth of Depth,* 1984, oil on canvas