Chapter

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INTRODUCTION

The ocular centricism of our contemporary culture manifests itself in urban spaces of visual seduction, turning architecture into a visual journey and digital art form of flattened images. Architecture is the only art form capable of producing a lived experience in three dimensional realities. The way in which we experience the sense of "being-in-the-world" today has since been driven by the single sensory understanding. Ocular centricism caused architecture to distance itself from the sensual qualities of human experience which has lead to the "consequent disappearance of sensory and sensual qualities from the arts of architecture." (2000: 10)

Juhani Pallasmaa, the Finnish architectural theorist, argues that multi-sensory experience must be: "equally measured by the eye, ear, nose, skin, tongue, skeleton and muscle." (2005: 41) French philosopher Maurice Merleau-Ponty discusses how we experience our world in a pure perception through coordinated sensory dialogue: "My perception is [therefore] not a sum of visual, tactile, and audible givens: I perceive in a total way with my whole being: I grasp a unique structure of the thing, a unique way of being, which speaks to all my senses at once." (1964: 78)

In addition, David Michael Levin suggests that "a new mode of vision is emerging" (2005: 36); while the tectonic architectural language focused primarily on vision, it might also help to rebalance multi-sensory experience.

We "are beginning to discover our neglected senses" (2005: 37) due to the impact technological and formalistic driven architecture had on our senses. Today architects are beginning to strengthen architecture through the means of "materiality, and hapticity, texture and weight, density of space and materialized light." (2005: 37)

The views in the theoretical argument investigate the problems of perceptions of contemporary architecture and public space in general. This is reflected upon the prevailing dominance of vision as well as the ambiguity of Western architectural thought process. The writings of Christian Norberg-Schulz, Martin Heidegger and Juhani Pallasmaa, are used as primary inspirational sources.

This dissertation aims to build theoretical argument around the significance of sensory architectural experience and place making in the urban realm. How we experience architectural space in a society dominated by media: the thought process of a technology-only approach is to be questioned. The perception of architectural design needs to re-emphasize a sensory architectural tectonic as decisive design generator. Thus seeking to establish an architectural design methodology and thought process to guide decision making and development.

FIG 2.1_Photo of Author, Villa Savoye, Poissy, France, Le Corbusier (1929), 2007
FIG 2.2 - 2.3_ Photo's taken by Author, Chapelle Notre-Dame du-Haut, Ronchamp, Le Corbusier (1954), 2007

"You employ stone, wood and concrete, and with these materials you build houses and palaces; that is construction. Ingenuity is at work. But suddenly you touch my heart, you do me good, I am happy and I say: This is beautiful. That is architecture. Art enters in." (Le Corbusier, Etchells 1948: 187)

BEING IN THE WORLD

The question of man's existence in the world by means of his adaption towards technology plays a primary role in urban experiences. "Technology, in this sense, e.g. refers to an overload of information, electronic media, combined with the impact of a so-called fast-food society and car orientated culture." The way in which we experience the sense of being-in-the-world forms the primary basis towards theoretical argument since our senses have been extended by technology, but also inhibited by technology.

Juhani Pallasmaa summarizes the virtues of architecture as: "Architecture, as with all art, is fundamentally confronted with questions of human existence in space and time; it expresses and relates man's being in the world." (2005: 16)

Man's existence is explained through the notions of dwelling. According to Heidegger, the primary purpose of life is dwelling; he maintains that: "...the way in which you are and I am, the way in which we humans are on earth is dwelling..." (1980: 10)

Being able to "dwell", one needs a specific environment to dwell in. Identification and orientation are primary elements towards man's being-in-the-world; it gives him a sense of belonging to a specific place. Norberg-Schulz collaborates that man dwells when "...he experiences the environment as meaningful." (1980: 5) The external environmental order consists out of a distinct character symbolizing a unique "spirit of place." (1980: 5)

Contemporary urban man often dwells by embodying an "electronic skin" as a means of being-in-the-world. Malcolm McCullough, a professor in electronic urban realms, states that "the sustainability of our culture is depended on the appropriateness of our adaption." (2004: 211) Technology has become part of the everyday, fully integrated in our daily lives; a means of dwelling in the urban realm and adapting to nature, the medium in which we create a "sense of place."(2004: 172)

Marshall McLuhan, the pioneer of media theory, explains that: "During the mechanical age we have extended our bodies in space. Today, after more than a century of electric technology, we have extended our central nervous system itself in a global embrace, abolishing both space and time..." (1987: 3)

Technology transformed man's mobility and concept of belonging, giving him a new sense of awareness, consciousness and participation. The extension of human senses is the means in which he sustains himself, making his everyday life faster, more efficient, doing more by doing less.

The views in the next section investigate the current theoretical debate by various theorists on the state of architectural experiences in our current society. These views are also strengthened by personal experiences of architectural marvels and astonishing displays of contemporary materials.

FIG 2.4_Photo of Author, Guggenheim Museum, Bilbao, Spain, Frank Gehry, 1997
FIG 2.5 - 2.8_ Photo's taken by Author, Guggenheim Museum Bilbao, Spain, Frank Gehry, 1997

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FIG 2.9_Photo of Author, Piccadilly Circus, London, UK

FIG 2.10_Photo by Author, Zaha Hadid Exhibition, London, UK

FIG 2.11_Photo by Author, Architects Association, London, UK

FIG 2.12_Photo by Author, Zaha Hadid Exhibition, London, UK

ARCHITECTURE IN CRISIS

Throughout history the human sensory experience has been dominated by vision. The ancient philosophical writings of Plato (428 – 427 BC) and Aristotle (384 – 322 BC) were proliferated by ocularcentrism towards the point that knowledge of vision and light became the symbol for truth.

The Renaissance again emphasized the importance of vision where a hierarchy of sense was established. The introduction of the linear perspective acknowledged vision as the noblest sense with sound, smell, taste and touch to follow. (2005: 15-16)

During the modernist period, intellectual formalistic architecture was emphasized which drew upon the realms of painting, sculpture and the production properties of the machine in particular. This had a direct impact on the thought process of Le Corbusier during the early stages of his career where he mentions: "I exist in life only if I can see"..."I am and I remain an impenitent visual – everything is in the visual"..."One needs to see clearly in order to understand" (2005: 27)

However, a separation and imbalance of sensory experiences have become distinctive in our contemporary technological culture. The hegemony of a vision dominated society is reflected in the views of Pallasmaa: "The pathology of today's architecture can be understood through a critique of the ocular bias of our culture. Architecture has turned into an art form of instant visual image...it has left the body and the senses, as well as our memories and dreams homeless." (2005: 19)

Contemporary architecture, instead of an existentially grounded plastic and spatial experience of creative expression, has adopted the psychological strategy of hyperbolic advertising and instant persuasion. This is the result of a society dominated by mass media, consumerist fashions, delivered through digital media consisting of the internet, advertising and television.

Today architecture has joined this digitally super charged hyperbole: media generated architecture of intellectual exercises. Sculptural forms of enclosed empty shells serving as little as being decorative sheds in shiny armor. Paper architecture: a "Zahanism" (author) thought process pervaded into the prestigious architectural schools of the western world.

In South Africa this often manifests along highways: fast architecture shaping a built environment of silhouette and instant gratification detached from existential sincerity. (2009: 167) David Harvey refers to this as being: "A rush of images from different spaces almost simultaneously, collapsing the world's spaces into a series of images on a television screen..." Michael de Certeau adds to these notions by saying that: "... our society is characterized by a cancerous growth of vision...transmuting communication into a visual journey."(2005: 24) This ocular centrism caused architecture to distance itself from the sensual qualities of human experience which has lead to the "consequent disappearance of sensory and sensual qualities from the arts of architecture." (2000: 10)

These intellectual contemporary monuments: formalistic expressions, canvasses in urban landscapes, terms as being "fragile" architecture of "weak structure and image." (2000: 81)

Pallasmaa, as mentioned before, argues that multisensory experience must be equally measured by the eye, ear, nose, skin, tongue, skeleton and muscle. (2005: 41) According to Merleau-Ponty, we experience our world in a pure perception through coordinated sensory dialogue: "My perception is [therefore] not a sum of visual, tactile, and audible givens: I perceive in a total way with my whole being: I grasp a unique structure of the thing, a unique way of being, which speaks to all my senses at once." (1964: 78)

The creation of a full spectrum of bodily experience in urban realms is of great importance. Bachelard speaks of "the polyphony of the senses" (2005: 41); where the eye collaborates with the body to give a strengthened sense of reality and constant interaction with environment. The five sensory systems being the: "visual system, auditory system, the taste-smell system, the basic-orientating system and the haptic system." (2005: 42)

The expansion of touch is the haptic system which serves as basic-orienting towards the sense of direction and gravity. This provides a frame of reference for the other senses in relation towards the body.

The haptic system stretches beyond the sense of touch only and absorbs the whole body. It incorporates the usual understanding of experiencing objects through touching them with our skin as well as perceptions of warmth, cold, pressure, pain, and the kinesthetics of movement.

Ashley Montagu emphasizes the importance of the tactile realm: "(the skin) is the oldest and the most sensitive of our organs, our first medium of communication… Touch is the parent of our eyes, ears, nose and mouth. It is the sense which became differentiated into the others…" (1971: 3)

Merleau-Ponty's notions on architectural experience can be directed or interpreted towards the spatial sequence: light, material and texture. The way spaces feel, sound and smell, has equal weight towards the visual appearance. The technological extensions of our senses might also help to re-balance multisensory architectural experience. Architects have slowly realized the neglect of sensory experience in technological and formalistic driven designs. Today architects are beginning to strengthen spatial experience by re-evaluating this technological thought process. (2005: 36-37)

Architecture itself has a deep "rootedness"; the only art form capable of producing a lived experience in three dimensional realities – which should be enhanced by considerations of light, texture; while considering technology carefully.

FIG 2.13_ Photo of Author, Boa Nova Teahouse, Leça da Palmeira, Portugal, Alvaro Siza 1963
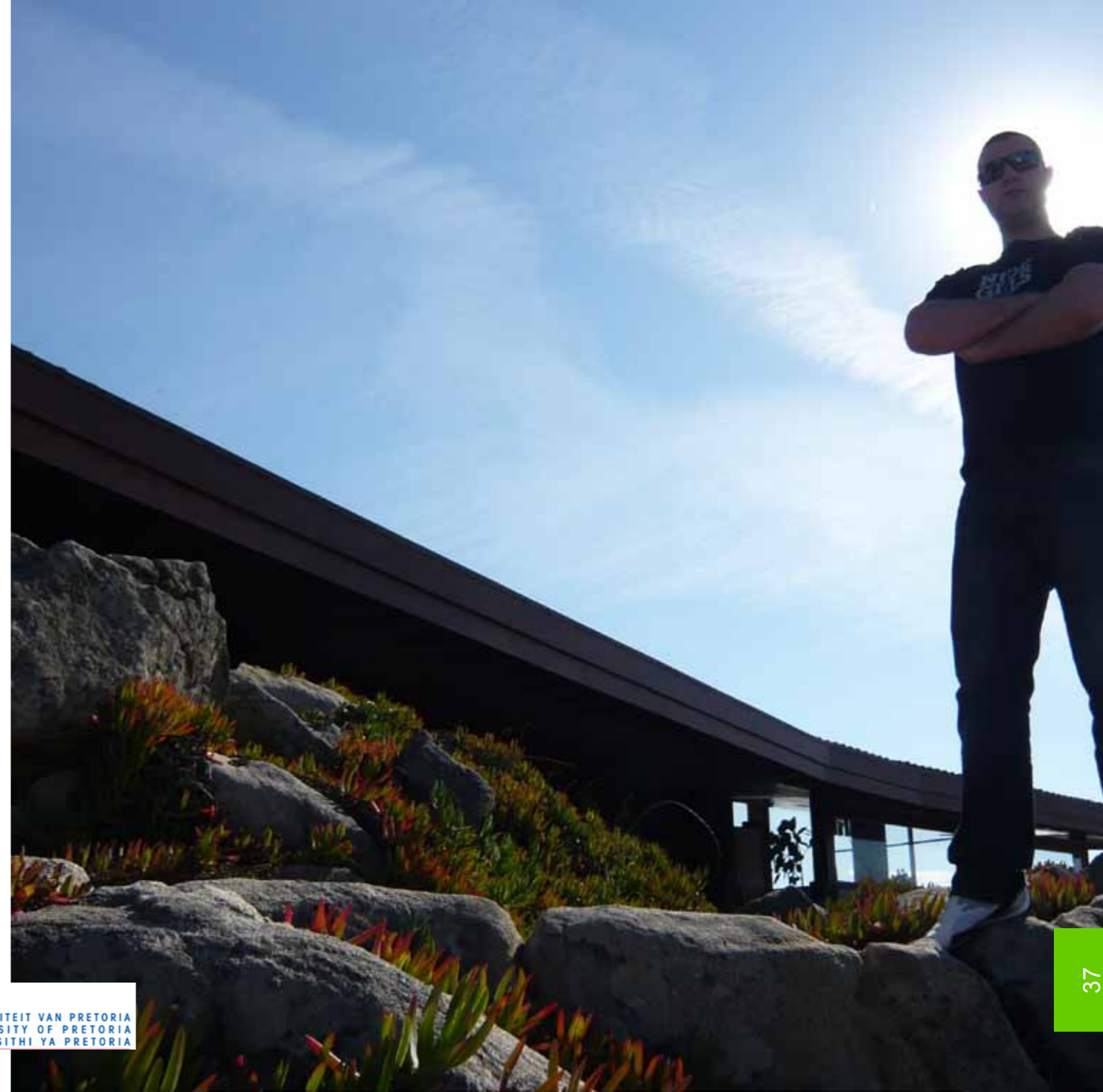
The way in which we experience the sense of being-in-the-world has since been driven by the single sensory pleasure for the eye. The intention of architecture now, probably best described through the words of Le Corbusier towards the latter phase of his career, to uncover the existential truth: "The purpose of architecture is to move us. Architectural emotion exists when the work rings within us in tune with a universe whose laws we obey, recognize and respect." (1980: 6)

The question now rose: How does an architectural tectonic achieve an expression which stimulates multi-sensory experience of space and place? How the embedding of new digital- and communication technologies can be articulated by a more traditional approach; Will this new kind of vision and enhanced sensory balance, the technological "extension of our senses" be adapted by this unique architectural building methodology to give a full experience of our place and being in the city? Will this "move us"?

TOWARDS A SENSORY ARCHITECTURAL DESIGN METHODOLOGY

Sensory architectural experience focuses on the integration of bodily experience of the world, not just being a visual journey; the art should express its tectonic logic, sense of materials and empathy. Bachelard mentions that we should not only be mere spectators in the interior world of architecture. (2005: 25) Some architects responded to the notions of haptic experience; an architecture which recognizes realms of sound, smell and taste.

The architecture of Frank Lloyd Wright and Alvar Aalto identified the physical body and also both conscious and the unconscious human reactions. The works of Portuguese architect Alvaro Siza also consist of a strong humane experiential tectonic. Current sensory experiences can be seen in the works of contemporary architects such as Caruso St John, Albalos & Herreros and Glenn Murcutt. It is evident that a new mode of thinking is emerging. This year's Pritzker prize winner (the highest ranked architectural award in the world) achieved by Finnish architect Peter Zumthor is a case in point. He works in the art of sensory architecture in combination with new technologies, turning technological constructions into a positive experience.

Elements highlighted in the following section investigate a multi-sensory design methodology in terms of light, touch and sound (and ultimately media).

Light

The presence of light in modern architecture has become too overwhelming, instead of emphasizing our being in the world. According to Pallasmaa, "Homogenous bright light paralyses the imagination in the same way that homogenization of space paralysis the experience of space."(2005: 46) He elaborates on these notions and confesses that architectural light has turned into a quantitative manner and the window has lost its role as mediator between the inside and outside worlds. The shadow is an important tactile element in design as it can perceive depth and texture, smoothness and roughness of materials.

Pallasmaa continues that: "In great architectural spaces, there is a constant, deep breathing of shadow and light; shadow inhales and illumination exhales light... The shadow gives shape and life to the object." (2005: 47) Mexican architect Luis Barragan claims that contemporary public spaces would become more enjoyable through lower light intensity and uneven distribution. (1989: 242)

Le Corbusier's architecture incorporates a strong tactile experience in the forceful presence of materiality and weight. The architecture makes us aware of the ever changing external environmental conditions. He states that: "Architecture is the masterly, correct and magnificent play of masses brought together in light." (1959: 31) He expresses a lived experience through the use of plasticity and spatial experience which uncovers memory, dream and imagination.

Touch

The tactile sense is an important element as it connects our being with the materiality of the world. Materiality is an essential architectural tectonic as it provides the platform for a creative build environment and sensory experience. The architectural skin expresses temperature, density, weight and texture of the building.

Pallasmaa acknowledges tactility as a primary element towards the understanding of architecture: "The door handle is the handshake of a building." Kenneth Frampton maintains that: "The tactile returns us literally to detail, to handrails and other anthropomorphic elements with which we have

intimate contact; to the hypersensitivity of Alvar Aalto, to the coldness of metal and the warmth of wood…" (1988: 8)

The possibility of touching in contemporary urban cities has been left in vain. Mechanical equipment and artificial produced materials have replaced the manifestation of the natural tectonic.

Contemporary architecture has aimed towards ageless perfection and avoids the process of aging. Pallasmaa states that we have to mentally experience a reality which is rooted in the continuity of time.

Kahn famously stated that "the brick wants to become and arch", meaning that the building should be true to its means of construction and laws of nature. Being true towards the essence of materiality expresses a sensory language of "strong structure and image."(2000: 81)

Sound

Architecture presents a silence of materiality and light in space, smells stimulate memory of place and spaces. Sound is a powerful element in spatial experience. We can almost hear architecture only by the mere sound it reflects.

The sound gives us clues and impression of space, character, materials, and people. There is a clear distinction between in- and outside events. Background experiences of auditory acoustic sounds: Pallasma argues that "tranquility" is the most essential acoustic experience in architectural space." (2005: 52)

Contradicting the previous elements of e.g. touch, the question now arises: How does media technologies compliment multi-sensory experiences. The views in the next section seek to understand how media can be invested into architecture as enhanced sensory balance.

Media

According to McCullough the unique character of embedded media technologies in urban environments goes beyond the obvious appearance of screens only: "New forms of ambient, haptic and multi-user interfaces promote the shift from objects to experiences. Instead of emphasizing the visual identity of an object...we need to address the process of identifying with an experience." (2004: 157) It is evident that the experiential qualities of these technologies have shifted from objects to experiences, contributing towards a more diverse urban realm.

The social organizational dimensions of architecture and media technologies run parallel with each other. It reflects upon our everyday needs, provides us with memories which grant an element of non-physical values. Media technology introduces a new electronic skin of interconnected networks, new layers of cultural expression and activities within the city.

Media surfaces create a new dynamic as it is a constant flux of patterns and colors, carrying messages and information. The dynamics of embedded technology can be adjusted to different times of day and events.

Public space now has the means to facilitate cultural and individual expression, sharing information, events and ideas. The quality of public space can now be enhanced through meaningful journalism; a place where I can come to express and experience the cultural city's activities as a whole.

Digital technologies, media screens, and skins, should be applied to extend and compliment architecture's reach. Media technologies enable the building to adapt to various scenarios and events during day and night. Media technology introduces a new electronic skin of interconnected networks, new layers of cultural expression and activities within the city.

A unique tectonic can express the use of new technologies and still encourage the return of a more habitual and humane architecture concludes through the combination of new technologies, digital media and traditional architecture. Technology has become part of architecture and projects a new meaning to place, but is simultaneously rooted in the phenomenology of the past, embracing our being in the world, or city.

FIG 2.14 - 2.15_ Blur Building, Exposition Pavillion for Swiss Expo, Yverdon-les-Bains, Diller Scofidio + Renfro, 2002
FIG 2.15_High Line Concept, New York, USA, Diller Scofidio + Renfro, 2009
FIG 2.16_Blur: Braincoat, color coded and vibrating raincoats matching visitor profiles in Blur Building, 2002

CONCLUSION

The search for multi-sensory architecture is a multi-faceted methodology asking for different interpretations, as each individual project is unique. The fact that urban environments have no direct connection between the natural- and built phenomena challenges a unique architectural interpretation. Urban architectural space however, still possesses the power to express natural phenomena through creative design.

Aristotle (384 BC – 322 BC) maintained that the whole is greater than the sum of its parts. It is the combination between the slowness of architecture in contrast with the constant flux of people and media technologies which produces a unique experience of place.

This most essential solution can be found through the famous words of Kahn: "a building should be what it wants to be." (1980: 197) The built environment sets a fixed stage which organizes the constant flows of people, resources and information. The art of architecture lies amongst the oldest, most legible and understood forms of fixed flows in the urban environment: according to McCullough: "Quiet architecture may be our most natural technology." (2004: 64)

The study of the human's being-in-the-world has the potential to produce a space which enhances the versatility of urban space, to become a place for valid socio-cultural urban expression. To conclude through the words of Pallasmaa: the most comprehensive and import architectural experience is the "...sense of being in a unique place." (1996: 452)

The art of contemporary architecture in the South African context should NOT reflect upon the spirit of an American Dream; Gehry Sculpture; "Zahanism" (author) expressionist, Foster's heroic high tech, British classical of Chipperfield, French flair, casinos of Italian elegances; for now we have our own stage set for the production of journalism in the cultural city. Architecture with the presence of a valid South African spirit of expression; a place filled with the presence of "Madiba magic." (refer to p. 87)

"Architecture is the production of the effect of stillness, an amazing effect in the world that is endlessly moving." (Mark Wigley in Tshumi & Cheng, 2003: 107)

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FIG 2.17_ Photo taken by Author, Leça Swimming Pools, Leça da Palmeira Portugal, Alvaro Siza 1966

FIG 2.18_Dramatic play of shadow on textured wall   FIG 2.19_Bruder Klaus Field Chapel, Wachendorf, Germany, Peter Zumthor, 2007   FIG 2.22_Soft filtered light, Saint Benedict Chapel, Sumvitg, Switzerland , Peter Zumthor, 1988   FIG 2.23_Spatial experience enhanced with colored light
FIG 2.20-21_ Intimacy and calmness of interior space displayed through multifunctional contemporary glass facade, Kunsthaus, Bregenz, Austria, 1997   FIG 2. 24_Materiality enhanced with shadow   FIG_2.25_ Calm spatial quality, Thermal Baths Vals, Graubünden, Switzerland, Peter Zumthor, 1996

FIG 2.26_Tactile quality nature adds to textured surface   FIG 2.27_Kolumba Art museum, Cologne, Germany, Peter Zumthor, 2007   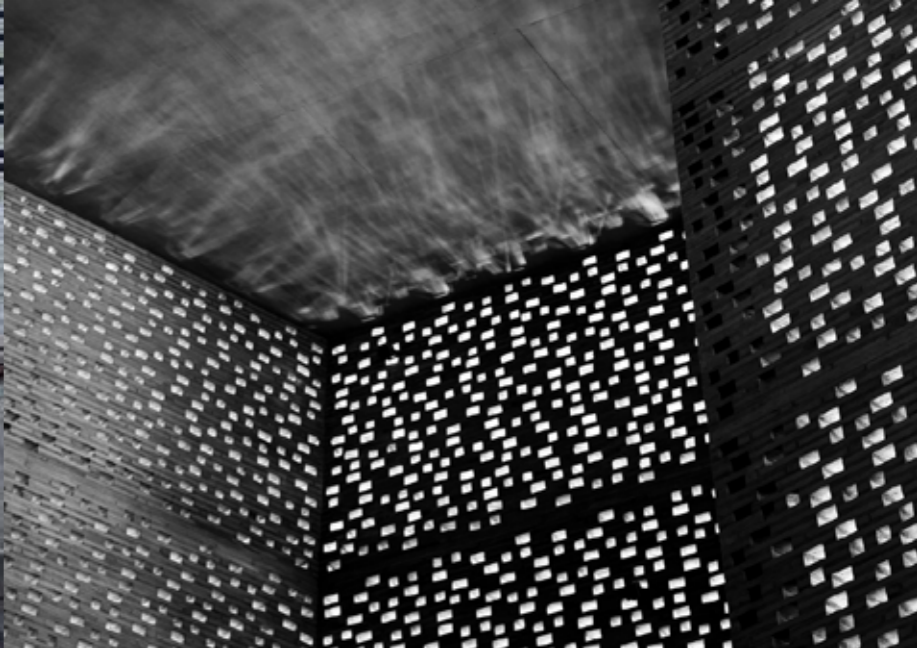   FIG 2.30_Layering and hand crafted sculptural quality of mass and tactile materials   FIG 2.31_Rythmical play of shadow texture through mass wall

FIG 2.28-29_ Poetic quality of industrial materials and soft interior light quality, Jose Hierro Public Library, Usera, Madrid, Spain, Abalos & Herreros, 2003   FIG2. 32_Life shadow adds to spatial quality   FIG_2.33_ Spatial density and soft texture enhanced by light, Brick House, London, UK, Caruso St John, 2005