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# CHAPTER 4 - THEORETICAL PREMISE



## 4.1 Approach

Theoretical study is a way and means of informing as well as substantiating one's design. Various theories that are believed to support the issues that this project proposal seeks to address, have been investigated.

## 4.2 Philosophy

### 4.2.1 Towards an Architecture of Experience

At present public architecture and urban design has allowed itself to get caught up in the 'rat race' that rules over society today. Buildings and public spaces emanate the fast pace of our daily lives, serving only as shells in which the user carries out his or her daily tasks. Public design no longer caters for the individual and it is on this level that everyone experiences life. In his book *Art as Experience*, John Dewey states that "if the gap between organism and environment is too wide, the creature dies" (Dewey 1934:14). This is indeed what is happening in our cities today.

*"Art should not be explained; it must be experienced"*

Steen Rasmussen (1989:9).

Architecture has long been seen as the 'functional art', but it is the art in architecture that affords its users a fantastic and inspiring experience.

In his book, Dewey brings to light that architecture "expresses the

enduring values of the collective human life" and that it "represents the memories, hopes, fears, purposes and sacred values of those who build" (Dewey 1934:221), for a specific purpose.

*"Architecture is produced by ordinary people, for ordinary people; therefore it should be easily comprehensible"*

(Rasmussen 1989:14).

Inspiration can therefore be found in the ordinary. Dewey notices that as people "being alive, we seek to live, until we are cowed by fear or dulled by routine" (Dewey 1934: 169). Re-interpreting the ordinary "intensifies the emotional thrill and punctuates the interest that belongs to all breaks in everyday routine" (Dewey 1934:30). It is when ordinary experiences bring a depth of understanding into the public realm, that architecture and the way in which it influences its users, is capable of enticing them and affording them an experience that contributes positively to their perception of the world. Architecture is an art that people experience first hand. It is literally an art of the streets and therefore greatly influential. The user must therefore be capable of participating with the architecture of the city. Dewey states that "the career and destiny of a living being are bound up with its interchanges with its environment, not externally, but in the most intimate way" (Dewey 1934: 12). It is so necessary that urban architecture begins once again to interact with the people of the city, particularly for their benefit.



see

perceive

glimpse

*The city is a place filled with interactions, contradictions and contrasts, which give rise to tension.*

It is these areas in a city where past and present life overlaps and merges that intense urban energy is found. Opportunities for intervention are often present in these areas as architecture is capable of emphasizing the way in which the past strengthens the present and in turn shows how the future may indeed unfold. It is when the user is made aware of this layering that their individual consciousness awakens, their perceptions and personal memories are triggered, enriching the experience had by them. A successful work of architecture is re-invented each time it is experienced by a different individual because perceptions are completely authentic. Although rooted to a specific site, it is in this way that architecture becomes universal. It is in this way that cultural barriers and racial diversity are overcome.

Due to the nature of lifestyles today, experiences are so often distracted, dispersed and unfulfilled. In order for an architectural experience to be grasped fully, amidst the hustle and bustle of daily life, it needs to become a mediator and challenge the usual perceptions of people.

Dewey defines an experience as an entity in which the "flow is from something to something..."

*there are pauses, places of rest, they punctuate and define the quality of movement"*  
(Dewey 1934: 36).

This suggests that one undergoes an experience due to the unfolding of a continual interaction between a person and the environment. It is therefore clear that an experience has a definite pattern and structure due to the relationship that is set up between the user and the environment. An experience becomes somewhat of a narrative between the two, where "the plot...requires a stage, a space, wherein to develop and time in which to unfold" (Dewey 1934:42). Architecture thus transcends both space and time as there is an "energy of position as well as motion" (Dewey 1934:209).

All experience begins with expression. In architecture, the articulation of materials, to form a coherent whole, is an expressive means of communicating with people. Dewey states that

*"communication is the process of creating participation...of making common what had been isolated and singular"*  
(Dewey 1934:244).

Materials can therefore be used to represent certain nature of their own experience of the world: that it presents the world within a new experience which they undergo" (Dewey 1934:83).

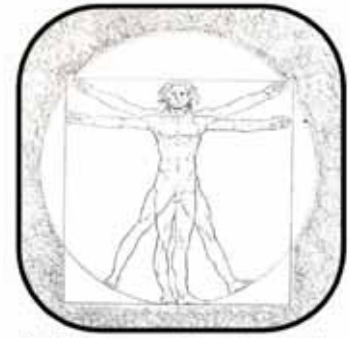


Fig 4.1 Human scale and proportion. (Ching 2007:276)

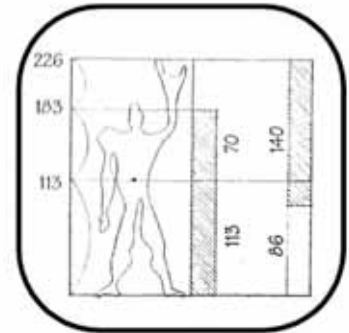


Fig 4.2 Le Corbusier's "The Modular". (Ching 2007:302)



Fig 4.3 The human body's range of motion. (Ching 2007:311)







Expression triggers one's senses and in turn an experience is created. A person's senses form the means to fully understanding their surroundings. However human senses do not operate in isolation, but in conjunction with one another. Dewey states that "it is not just the visual apparatus...the entire organism, with all its charge of the past and varied resources operates, but operates through a particular medium, that of the eye, as it interacts with the eye, ear and touch...while we see, we also hear, we feel pressures and heat or cold" (Dewey 1934:195). In this way, a dualism is created in which the physical senses speak to the realm which the mind controls.

It becomes evident that the creation of an experience is both physical and determined by one's past (i.e. cultural roots). These two factors are explored further:

#### 4.2.2 The Physical Perception of Architecture

Juhani Pallasmaa observes that cities themselves confront the "human existential condition" (Pallasmaa 2005:11), with which we are faced today. People crave instant gratification through commodities, advertising and branding. The hierarchy of the senses has therefore changed over the years. The use of digital media, emphasizing the visual sense, has lessened our ability to use the other senses simultaneously when experiencing the world that surrounds us. Le Corbusier is known to have stated that, "I exist in life only if I can see" (Pallasmaa 2005:29). In turn, it is concerning to witness the one-sidedness perception has taken

with regards to current architecture. Pallasmaa attributes the "cancerous spread of superficial architectural imagery today, devoid of tectonic logic and a sense of materiality and empathy" (Pallasmaa 2005:24) to the creation of environment which promotes the dominance of one tactile sense over the other. If this occurs, the user begins to feel alienated and detached from their experience.

Pallasmaa suggests that,

*"the way spaces feel, the sound and smell of these places, has equal weight to the way things look"*  
(Pallasmaa 2005:7),

The human body is the vessel through which all perceptions are possible. It is ones tactile senses (sight, hearing, touch, smell and taste), that unlock all human experiences. They are a person's means of orientating oneself within the world, a "locus of reference, memory, imagination and integration" (Pallasmaa 2005:10).

It is these senses, that contribute so richly to a person's experience of the world, that will now be studied in more detail.



### a) Sense of Sight

Pallasmaa differentiates between two visual fields. The first of these visual fields is focused vision. This refers to the field of vision that is being observed directly. It is sharp and confrontational in character. It is within this field of vision that a user engages straightforwardly and consciously with their surroundings. The second field of vision is unfocused vision. This field of vision is peripheral and therefore inclusive of the person's surroundings, much of which they are only subconsciously aware. The context which is subconsciously perceived is important in creating and enveloping effect and eliminating the feeling of alienation. However inclusive vision is, it is directional and still the sense that renders a person an observer in their own world. It is the other senses that unite a person with it.

### b) Sense of Smell and Taste

Certain smells and tastes are memory triggering. According to Pallasmaa, "The nose makes the eyes remember" (Pallasmaa 2005: 54).

### c) Sense of Hearing

Sound is omni-directional and therefore an all-incorporating sense.

*"Most people would say that as architecture does not produce sound it cannot be heard. But neither does it radiate light, and yet it can be seen"* (Rasmussen 1989:224).

One's ears receive and absorb everything that is happening around one, as opposed to omitting what is not wanted. Sound therefore gives the world a sense of continuity. A person's ears are capable of perceiving volumes depending on the amount and quality of sound within a space.

### d) Sense of Touch

The skin is one's most tactile sense, as it is through this specialised membrane that the world is literally 'felt'. By touch, a person is quite literally connected to the earth. As the hands touch, they think and learning is stimulated.

Due to its incredible influence on a person's daily life, it is necessary for architecture to address all the senses simultaneously, therefore becoming a fully integrated communicative medium. By adopting this approach, a person's sense of being in the world is strengthened, and invigorated.

### 4.2.3 Conclusion

One should seek to

*"re-sensualise architecture through the strengthened sense of materiality and hapticity, texture and weight, density of space and materialise light"*  
(Pallasmaa 2005:31).

It is through environments like this, that one will begin to rediscover all the senses that have been neglected.



Fig 4.4 The average dimensions for a seated adult man. (Adler 2001:2-1)

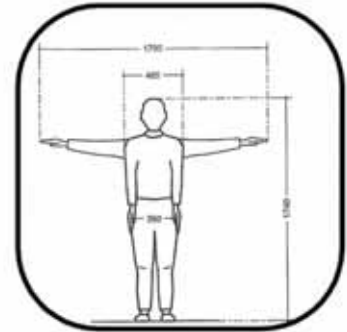


Fig 4.5 The average frontal dimensions for a standing adult man. (Adler 2001:2-1)

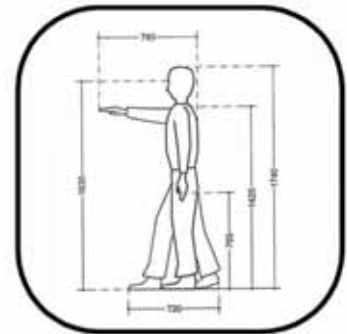
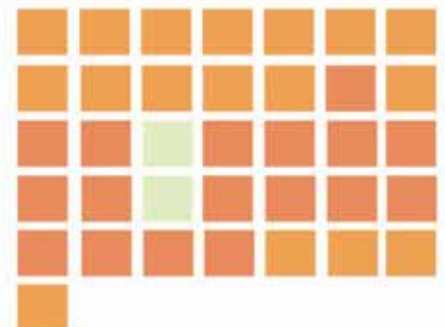


Fig 4.6 The average side-on dimensions for a standing adult man. (Adler 2001:2-1)



relish

delight

savour





## 4.3 Design Generators

### 4.3.1 Time and Materiality

Time can therefore become a visible, multi-faceted design element in the built environment. It becomes so multi-layered from portraying the passing of seconds, to days, to the passing of years. When communicated on all levels, architecture then "does not make time, but aspires to a more pleasant way of spending it" (Bourman 1993:18). This applies specifically to the context in which the proposed project is situated. The lives of those who use the station's facilities are governed by time, where people wait for transport or within minutes, miss a train, arrive early or late and thus their whole day is altered. What better environment in which to promote and area of transition; a place in which time is not perceived as wasted, but as a very necessary place to pause and orientate oneself from before beginning one's day.

*"Architecture is an extension of nature into the man-made realm"*

(Pallasmaa 2005:41),

and is therefore not isolated and self-sufficient. It measures the passing of time and acts as a witness to the changing trends of society. Architecture itself relates profoundly to the human experience as it too exists in space over a period of time (being one of the few things out of human control).

Buildings too, experience birth, life and death. Leatherbarrow confirms this by stating that

*"architectural duration implies a past that is caught up in the present and anticipates the future"*

(Leatherbarrow 1993:64).

In the past, natural materials have blatantly portrayed their origins and shown their character as time has passed. Weathering of materials over time is the "continuous metamorphosis of the building itself" (Leatherbarrow 1993:16). The user is aware of the building's impending death. Pallasmaa notes that "we have a mental need to grasp that we are rooted in the continuity of time" (Pallasmaa 2005:34), and the built environment is testament to this.

*"Weathering brings the virtual future of a building into a dialogue with its actual present, as both are entangled in its past"*

(Leatherbarrow 1993:113),

and therefore reveals the world's ever-changing circumstances. It is for this reason that people often find themselves drawn to timeless, classical works of architecture. They subconsciously feel a close link between their own human experience and the perceived architecture. Architecture has "lost something of primitive man's sensitive awareness of textural surfaces" (Rasmussen 1989:178).



New materials and technologies used as tools in creating architecture today, no longer portray the passage of time. Today architecture seeks to deny time. It aspires to permanence and seems to challenge eternity itself. One should seek to,

*“re-sensualise architecture through the strengthened sense of materiality and hapticity, texture and weight, density of space and materialised light”*  
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It is through environments like this, that one will begin to rediscover all the senses that have been neglected.

Time can therefore become a visible, multi-faceted design element in the built environment. It becomes so multi-layered from portraying the passing of seconds, to days, to the passing of years. When communicated on all levels, architecture then “does not make time, but aspires to a more pleasant way of spending it” (Bourman 1993: 18).

### 4.3.1 The Body at the Centre - Ergonomics

The call is therefore for an architectural centered on the individual human body, along with its muscular and tactile senses. Pallasmaa observes that

*“with the loss of tactility, measures and details crafted for the human body - and particularly for the hand - architectural structures become repulsively flat, sharp-edged, immaterial and unreal”*  
(Pallasmaa 2005:31).

### 4.4 Conclusion

Architecture is set aside from other arts as it stimulates action and participation. It initiates, directs and organises movement. Every person experiences the world through their tactile, physical senses (sight, hearing, smell, taste and touch), as well as on an intangible, emotional level. It is by appealing to these senses that architecture will again begin to engage with its users and evoke positive responses from them. If it is believed that the aim of architecture is to provide a framework for people’s lives, then buildings should be formed around the lives to be lived in them.

It is this connection that this project proposal seeks to explore and re-kindle. It seeks to urge the user once again to connect with the built environment, circulate between its elements, move through them, run their hands along them, and within them truly experience the spaces that have been created.



Fig 4.7 The average dimensions for a seated adult woman. (Adler 2001:2-1)

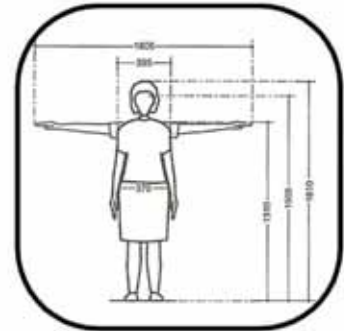


Fig 4.8 The average frontal dimensions for a standing adult woman. (Adler 2001:2-1)



Fig 4.9 The average side-on dimensions for a standing adult man. (Adler 2001:2-1)

“But the real question is this: is it not possible to conceive of an environment that not only calms, accelerates, accommodates or privatizes time, but which also makes ‘public time’ by explicitly taking the necessity of doing so as its point of departure? Is it possible to conceive of an architecture that does not separate by setting boundaries, but which unites people by telling stories relevant to these times? An architecture that synchronises? An Architecture that is not finished when the design has been translated into material form and handed over, but just begins at that point?” (Bourman 1993:18).



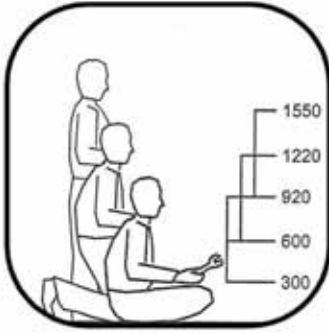


Fig 4.10 Body clearances 1 . (Adler 1999:2-7)



Fig 4.11 Body clearances 2. (Adler 1999:2-7)

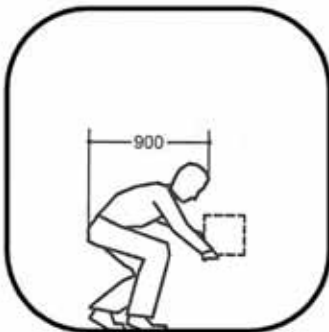
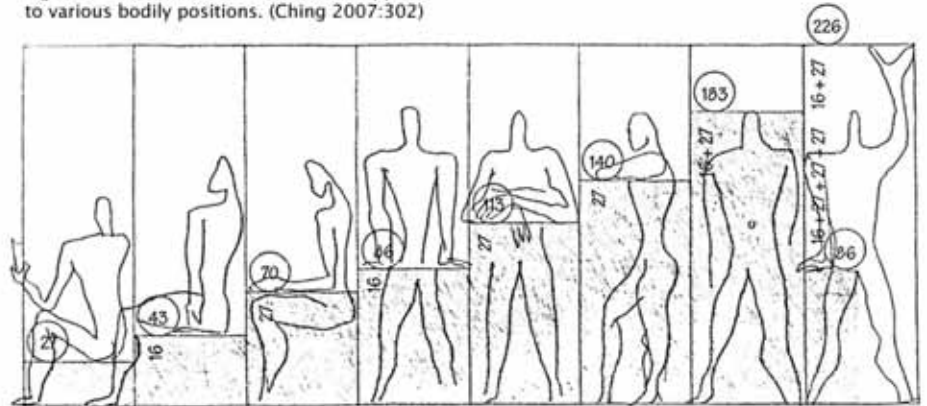


Fig 4.12 Body clearances 3. (Adler 1999:2-7)



Fig 4.13 Body clearances 4. (Adler 1999:2-7)

Fig 4.14 Le Corbusier's "The Modular" applied to various bodily positions. (Ching 2007:302)



# Theoretical Premise

"I confront the city with my body.  
I experience myself in the city,  
and the city exists through my embodied experience.  
The city and my body supplement and define each other.  
I dwell in the city and the city dwells in me"  
(Pallasmaa 2005:31).