LOOKING BEYOND FORM - EXPLORING THE MULTI-SENSORY QUALITY OF ARCHITECTURE

A DISSERTATION PRESENTED TO THE FACULTY OF ARCHITECTURE OF THE UNIVERSITY OF MORATUWA FOR M.SC. ARCHITECTURE FINAL EXAMINATION

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DECLARATION

I declare that this dissertation represents my own work, except where due acknowledgment is made, and that it has not been previously included in a thesis, dissertation or report submitted to this University or to any other institution for a degree, diploma or other qualification.

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ABSTRACT

As with most aspects of human perception, architecture is usually perceived through a visual syntax. Though the dominance of vision cannot be undermined, authentic architectural experiences consist of human encounters and bodily confrontations grasped through all the elementary senses including audition, touch, smell and taste. This is architecture of experiential events as opposed to that of image or form.

It can be observed that most contemporary architecture has been created to be objects of immediate persuasion with the impact of the visual image kept in mind. Though they may be visually seductive in two-dimensional representation (as in drawings and photographs), the uniformity, flatness of materials and the absence of a multi-sensory experience soon create a psychological weariness in the minds of those who work, live and visit these places.

This dissertation explores the auditory, touch, smell and taste dimensions of space, and consequently of architectural space though selected case studies. A literary study was conducted to set the theoretical dimensions from which key characteristics of multi-sensory spatial awareness were identified. Selected case studies were then analysed using the body as a tool of measurement while walking the space, focusing on the identified characteristics. The intention of the study was to create awareness of the significance of the subtle role played by the elementary senses in architectural spatial perception.

It becomes evident through the case studies that multi sensory spaces can arise due to a variety of reasons both intentional and circumstantial. Though the contribution of each sensory modality was important in creating a rich experience, some spaces were seen to incline towards a predominant sensory modality that helped articulate the space distinctly within the perceptual realm. Even though the phenomenological aspect of perception was not stressed in the dissertation it was soon realised that this approach could not be avoided as experiences are inadvertently linked to the acts of recollecting, remembering and comparing.

What was discussed in this dissertation and realised through the case studies, enhance the understanding of the role of the senses in spatial perception and how this contributes to strengthening one's experience of self as well as place.
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INTRODUCTION

Experiential architecture develops from real experiential situations as unfolding events of bodily encounters. Significant experiences of architecture are multi-sensory as space and scale is measured and grasped by the eye, ear, nose, skin, tongue, skeleton and muscle. Though architecture is primarily understood through a visual language structure, this ability to engage the whole sensorium is of great importance, as perceiving through vision alone eliminates the wealth of experiences that shape meaning in life.

Background

The multi-sensory aspect of architecture has not received much attention and critical study, the most notable work being by Architect Professor Juhani Pallasmaa who has published several articles and books addressing this topic. These sources were useful for this dissertation and were frequently referred. Many publications by philosophers such as Marcel Proust, Maurice Merleau-Ponty on the subject of sensory interaction in perception also proved useful. A considerable amount of literature exists on the phenomenological perception of architecture and space, these were not considered in depth, as this aspect of perception was not discussed in this dissertation.

Observation made.

Modern life is characterized by an increased isolation of individuals from each other and the sensuous interaction with the environment around them. Misused technology over-loads people with artificial stimulation usually confined to something visual and auditory in nature making the other senses almost redundant. There is greater focus on visual imagery designed to make instantaneous impact. This bias towards vision has pervaded into all aspects of culture including architecture, leading to the creation of buildings that are sensorial impoverished and detached from social and contextual issues. The resulting two-dimensional way of building has caused a psychological 'weariness', and may cause serious social and cultural erosion in the long run.
Though visual gestures maybe seductive, a memory of a space or place can be evoked by a smell or a touch, which at times can be the most powerful stimulus, and tends to remain at a sub-conscious level for a far longer period than a visual recollection.

Criticality of the Issue

Architecture of sensory reality, as apposed to one of conceptual idealism is identified as ‘Experiential architecture’ (Pallasmaa, 2000). Experiential architecture results from unfolding events of multi-sensory bodily confrontations. This allows for more significant human experience and opportunity for associative memory, resulting in a deeper knowledge of place. If the task of architecture includes enhancing people’s experience of themselves, and of the surrounding environment, it is critical that architects consider all sensory modalities of perception in designing the built environment.

The Intention of the Study

This would be an exploratory dissertation, discussing the multi-sensory aspect of space, exploring the auditory, haptic, olfactory and gustatory dimensions of spatial perception. The intention would be to sensitize and create an awareness of the extent to which these senses contribute to spatial awareness. These usually overlooked aspects of space can lead to a greater depth of architectural experience. Though perception of space also involves factors based on prior knowledge innate or acquired by experiences and cultural circumstances, these aspects would not be explored in depth, as it would be outside the scope of the study.

The overall structure of the study takes the form of 3 chapters consisting of descriptive and analytical chapters. The initial part of the essay is descriptive with a short inquiry conducted into the possible causes for the overriding importance given to image in contemporary society, and how this has affected aesthetics in general and consequently architecture.
The second chapter lays out the theoretical dimensions exploring the role of each elementary sense in the experiencing of space. Emphasis is placed on the other sensory modalities though the sense of sight and the reasons for its dominance are discussed briefly.

The analytical part of the essay consists a framework of analysis and the case study analysis. The primary objective of the case study analysis is to determine the extent to which the spatial characteristics and qualities identified can be discerned in architectural space. Finally, the conclusion gives a brief summary and critique of the findings.

Methodology:

An initial literature study was conducted to layout the theoretical basis. Publications and interviews by Professor Juhani Pallasmaa greatly influenced this dissertation, notably the book ‘Eyes of the Skin: Architecture and the Senses’ (1996). In addition to this, writings by Maurice Merleau-Ponty, and Marcel Proust on the subject of spatial awareness also proved invaluable. The literature survey helped to identify key aspects of multi-sensory awareness of space.

The purpose of the case study analysis was to determine to what extent the findings of the literature survey could be substantiated. The first study is the Ponnampalavaneswarar kovil at Kochikade. This was selected as it offered a chance to study an historic religious building that was a product of a specific culture—that of the South Asian Hindu community. The second case study was an architect designed private residence—the Mauli House at Pelewatte designed by Architect Vijitha Basnayake. This gave the opportunity to study an intentionally designed building that was also a private home with all the nuances associated with private dwelling. The final case study is the Fort Railway station. It was chosen because it represented a purely functional building that offered sensory experiences arising from functional activities related to railway travel.

The selected spaces were analyzed in relation to the experiences generated through the senses, with focus on the key aspects identified in the theoretical chapter. Precise information was not gathered using scientific instruments. Instead, the body was used as a tool of measurement while walking the space.
Scope and Limitations

Architecture can be perceived in several ways. This dissertation mainly discusses spatial perception through the senses. The phenomenological approach to perception, which is the meanings things have in our experience, will not be considered indepth as it is a vast subject that cannot be covered in a cursory manner and it is also an aspect that has been studied thoroughly in many philosophical and psychological work, except where certain sensations are linked to memory.

Though approximately 9 human senses have been identified up to date, this study is limited to spatial perception through what is known traditionally as the five elementary senses which are sight, sound, touch, smell and taste. Though the sense of sight is briefly discussed, the emphasis will be on the other sensory modalities.