



Alexandria University  
Faculty of Fine Arts  
Department of Decor

Subject of Thesis  
**The Application of the Immersion Theory on Form and Function in  
Interior Architecture**

for the degree of  
PHD in  
Interior Architecture

Presented By

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## Thesis Summary

The immersion principles and other symbolic characteristics of internal spaces are more continuous than their utilitarian functions that are subject to change and selection over time, and are at the same time a way to express a specific principle, theory, civilization or identity of the inner space through which the designer wanted to express His design idea based on time and space

**It all summed up in five chapters, which are:**

**•Chapter One:** The immersion Theory and its Criteria for Achieving Interior Architecture

The application of the term immersion or submersion deals consistently across the various fields of research related to the study of interior design

The immersion is a metaphorical term derived from the physical experience of immersion or immersion in water, which means surrounding a specific medium such as water and air, which captures all our attention. Below we will review some definitions and concepts of the Immigration and the historical development

**•Chapter Two:** The shift in interior design as a result of applying the concept of containment and sensory immersion.

**This chapter explains** the concept of the harmony of interior architecture, as the architectural philosophy that represents the relationship between nature, humanity and the built environment. This chapter deals with analyzing the stages of the transformation in interior design as a result of applying the concept of containment and sensory immersion. This transformation is explained through two levels: the concept of containment and immersion in nature and The concept of inclusion and immersion in internal architecture

**•Chapter Three:** Simulation Method Based on the Applications of Modern Technology and the New Materials and their Applications in Designing Interior Spaces

Here I defined tools of digital revolution that contributed in inventing new creational sources that depend on mathematical equations (Logarithmic and parametric equations and laws of mechanics of motions) and digitally generated forms (Topological forms). It managed to assort philosophy of digital forms that widely spread in many fields. Later philosophy and idea of digital forms were merged in modern formative theories that cope with demands of this age with all its renewed directions and theories.

Digital forms are forms that depend on usage of digital language and computer in the design base. It express experiences of new generation of renewed theories of varying architecture and interior design. It made a shift in design thinking. Designers was able to reach digital methods in design that helped in emersion of what is known of futuristic designs in terms of form, function and performance as well as what digital



technology and computer techniques offer to be freed from stereotypical traditions and norms. Therefore, process of digital design showed up. It is a complex process consists of several ideas developed through experiments and changing in dimensions.

It is not limited to just establishing forms and masses that are imagined by designer, however the designer interacts with computer by giving design alternatives and make adjustments in the design . He changes the course of design thinking by a set of geometric and non-geometric programs. that influenced design thought, and the technological influence derived most of its ideas from the natural ecosystem was simulated in Creating structural systems and structural elements that contribute to creating an internal space that controls immersed and integrated with nature

#### **•Chapter Four: The Impact of Applying the Concept of Containment and Immersion to the Engagement of Time and Place in Interior Design**

It deals with the structural values added to the internal space by emphasizing the time and space binaries, the "fourth dimension" in the design, which makes the user or the recipient more to benefit the space affects him and is affected by it, as this value gave priority to stability in architecture. This was done through an extrapolation of the concept of time and space through language, philosophical thought, studies, and scientific research, then a conclusion of the dual relationship in interior design has been one of the most important findings of the research, the general framework for the time and space of two is to reach a design that is achieved in its objective connotations Connected binary Between the basic dimensions that perceive the placeThe sensory dimensions of time within the framework of a four-dimensional design, through a relationship between memory, which represents the present of past things, and between vision, which represents the present of existing things, and between expectation and what represents the present of future things, this relationship is like making an icon that can be used in the work of a visual reference It is a sensory experience that accompanies the movement of the recipient in a specific period of time in a sequence and sequence of perceived scenes within the space by changing, rhythm, succession and sequence. The study ends with the practical application of the study in the open reading hall of the public library, Nasr City, inside the children's garden.