# Intellectual Consequences: Key Findings of Psychological Issues in the Architectural Design Studio

**Ghufran Ahmad Khan**

*F/o- Architecture Integral University, Lucknow*
*E-mail: ghufrankhanrchitect@gmail.com, ar.ghufran@gmail.com, gakhan@iul.ac.in*

**Abstract**—*As Architectural design is not hypothetical, it is largely concerned with the real life situations, important skills which enhanced through experiential learning, research and real interactions which helps in solving the issues related to the design studio.*

*Architecture students are buoyant to conduct site visits of the built environment in order to observe different phenomena. Unfortunately nevertheless, research indicates that these visits and exercises are simply casual and are not structured in any form of investigation or inquiry. As a result, students do not realize what to see and what to look for in the built environment. The case would be worse when educators attempt to offer students readymade interpretations about the physical world in lectures and seminars. This handicaps their abilities to gather, analyze, synthesis and process, different types of information. This is not to say that Design Thinking does not use analysis to inform the final solution, however the approach of a Design Thinker in terms of problem solving is from the perspective of the end goal.*

*The main motto of this paper is to identify the perceptions of students and faculty of architecture schools about the concepts related to psychological issues in architectural design project.*

*The paper has been designed in following parameters like the brief introduction on psychologies, mental processes, experiences and its behaviours, the rationality to analyze and fit solutions to the context. Finally I will be concluding the paper through findings and end up with abilities and skills required in the architectural design studios.*

**Keywords:** *Experiential Learning, Design Studios, Site Visits, Built Environment, Design Thinking, Perceptions, Mental Processes, and Behaviours.*

## 1. INTRODUCTION

Architecture has shifted from classes to masses and architecture education has also transformed since then, from artistic approach to multi disciplinary approach. Hence, seeing today's world the on-growing population, human settlements all needs an eye to watch and to overcome with certain issues. Thus, Architecture education needs a change. Architecture design is the backbone of the architecture education.

The main focus is to provide the reader with a critique based on the knowledge and experience of teaching and last but not
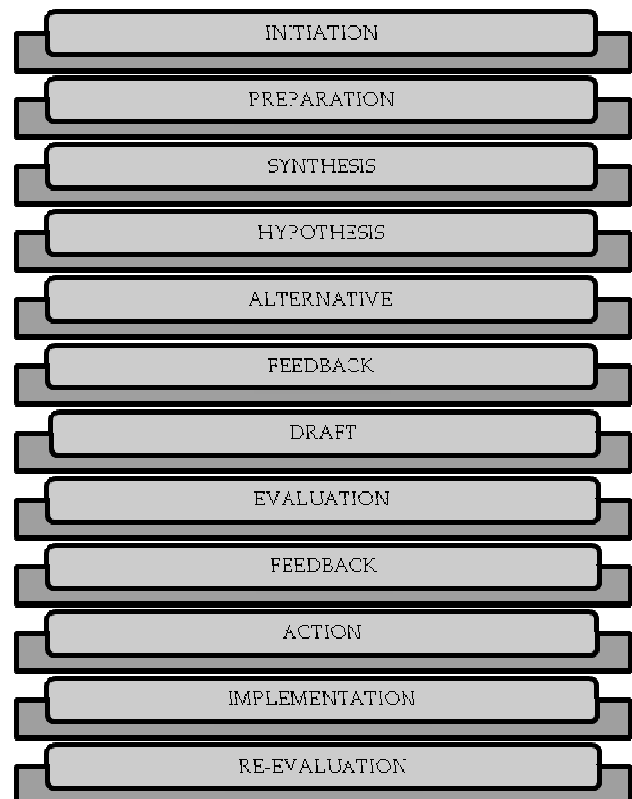


**ARCHITECTURE DESIGN PROCESS ADOPTED IN THE DESIGN STUDIO**

the least, psychological issues in Architectural design to architecture students in solving any design problem. Traditionally, the practice of Architectural design is learned through a project-based studio approach. In studio, students express and explore ideas, generate and evaluate alternatives, and ultimately make decisions and take action. They make drawings and 3-D models and reason with these

representations to analyze and test hypothesis about the design they present through the proposals, alternatives, and then interpret and explore their consequences. In their sketches students find visual analogies, discover new shapes and geometric configurations. Architectural design covers everything from identifying problems to specifying methods for dealing with the problems in order to reach solutions.

Architecture design studio is the ground where the students apply their knowledge and build up design skills. Thus, it deals with the profession of designing buildings and environments with considerations for their aesthetic effect.

## 2. DEVELOPMENTS IN ARCHITECTURE STUDENTS THROUGH ARCHITECTURE PEDAGOGY

Architectural design is the process of "learning by doing". Architectural design is a broad creative process:-

1) To stimulate, sensitivity and bring out creative talents.
2) To reinforce intellectual capabilities and develop proficiency in professional skills.
3) Student's role as responsive members of society, under supervision and interactive guidance.
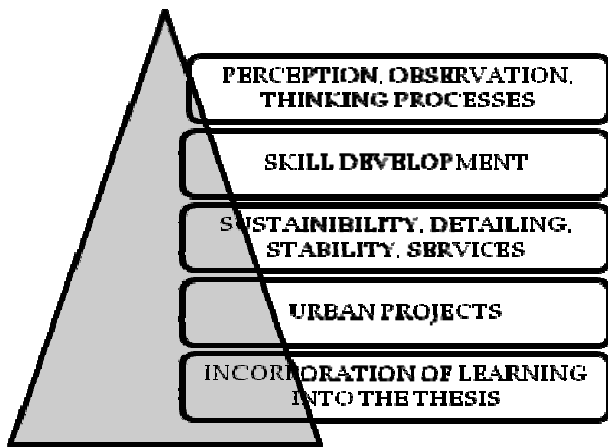


**PHASES OF DEVELOPMENT IN AN ARCHITECTURE STUDENT**

## 3. PSYCHOLOGY

Psychology is defined as the scientific study of mental processes, experiences and its behavior.[1] And the foremost function of the psychology is to optimize the human behavior. We can say that psychology is the study of experiences of people. Mental processes include the process of thinking, perceiving, remembering, forgetting, behaving etc. it is not the physical entity. We cannot see. We can observe only.
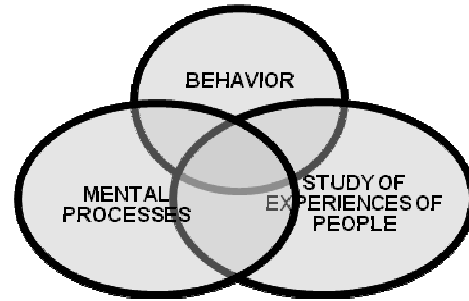
**PSYCHOLOGICAL PARAMETERS**

Under this point, we can have following parameters, like:
**Thinking**
**Mindset**
**Learning environment**
**Cognition**

We can further sub divide it into sub divisions, for our easement to understand the topic. I am going to show some trees related with the parameters of psychology in design.

### 3.1 Thinking

It is related to the cognitive processes. And these cognitive processes are derived from cognitive psychology. It is defined as the study of behavior, which is going on an individual's mind. In other words we can say that it is a problem solving process which deals with ideas.
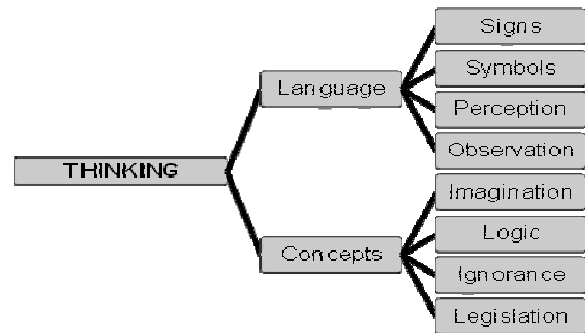


**PHASES OF DEVELOPMENT IN AN ARCHITECTURE STUDENT**

### 3.2 Mindset

Four P's in Architecture:-
➢ An Architect has to know about the people for whom he is working, who will be the end user.
➢ Understanding of the place, where a vision will shape up into a physical reality and climatic features, the ethos and aspiration and vernacular resources skills etc.
➢ Understanding of the period when the vision is turned into reality, the technology, materials, vocabulary of expression of the time that are at command for realization of a vision into reality.

➢ Understanding of the purpose, because every Architecture creation is made to serve for some function or the other.
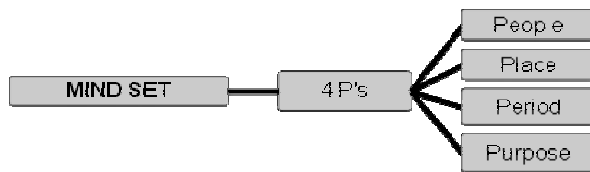


### 3.3 Learning Environment

Learning is a relative permanent change in behavior and understands through experiencing or constructing or discovering meaningful things. Ill fatigue and taking drugs is not the process of learning. Architecture of learning enables teachers:

✓ To identify the type of subject matter they are teaching (content, skill, combination).
✓ To develop instruction that engages mental processes appropriate for developing understanding.
✓ To identify the form and content of the appropriate assessments and develop those assessments.
✓ To teach with an emphasis on understanding, utility and integration.
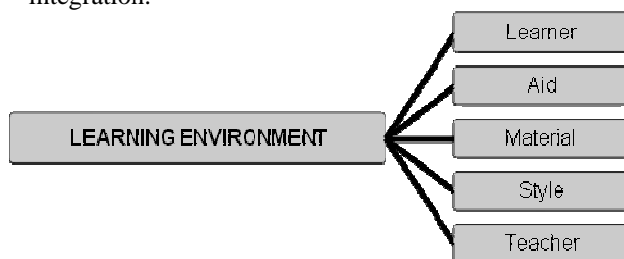


### 3.4 Cognition

It is the concept related with mind or intellectual development. Following sub domains coming under this domain are:

➢ Knowledge (Remembering or Recalling)
➢ Understanding (Ability to explain something)
➢ Application (Whether they can apply in their own work or not)
➢ Skill (Training sort of)
➢ Analysis (Dividing it into simpler things)
➢ Synthesis (Summarizing or combining)
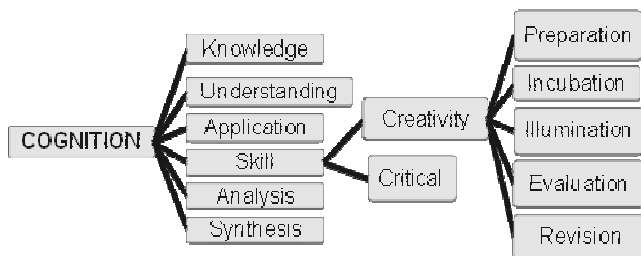


## 4. PSYCHOLOGY OF AN ARCHITECT

We need to find balance in how much we listen to the client or users. I believe that we as the architects are responsible for interpreting or translating the wishes, needs and concerns of the client or user. The interpretation of these concerns will be the foundation for the design.

The quality of the architect lies in being able to keep overview of the whole design, a quality that clients or users often lack. This sometimes means convincing the client or the users that some solutions are better than others. Never blindly follow them. The architect needs to stay critical. We need to keep in mind, though, that client and the user is not always the same person. If so, they both require a very different approach.

Architects seem to have lost their way. They focus too much on appearance, fame and glory. The problems in urbanism are more complex, but in general there is not enough attention to the need for well designed public spaces. We need to find our way back to architecture and urbanism that is dedicated to the people that have to live in it.

We, as architects, judge building by the aesthetic value but rarely do we judge building by how their users react to them, how they age, or how they meet the client's original program brief.

## 5. PSYCHOLOGY OF BUILDING

Architecture is a symbolic and intentional effort seems to reflect the psychology of its designers careless of time and culture. Space, form, and light are elements that are often incorporated either purposefully for aesthetic or practical reasons but more pointedly give creatures meaning, purpose and stability amidst an ever changing physical universe of seeming chaos.

A study of architecture and its effects on people yields a tremendous amount of learning from very diverse subjects. Gestalt psychology[2] seems to be central to how we experience architecture in suggesting our brains are pumped to understand the rhythm and patterns of architecture that in turn give a behavioural effect. It seems evident that people have a preference to generating patterns out to constancy and predictability from the unpredictability and chaos. As to a connection between architecture and people we obviously enjoy the input from patterns, however, this is true only for complex patterns that have some sort of ordering.

## 6. PSYCHOLOGY OF ARCHITECTURE STUDENTS

Psychology of the students is to resolve the abstract problems. They learn theory and thinking skills and link it with realization. Students explore the compositional strategies in

[2] 2010, Fourth Edition, **Psychology,** *G. Neil Martin Middlesex University, UK Neil R. Carlson University of Massachusetts, USA William Buskist Auburn University, USA*

2D and 3D. Students thinking are to enhance the model making skills in variety of materials. Their psychology is to understand and use the process of critique through informal pin-ups and formal presentations. Students think of the built environment with respect to the site considerations. Student's main focus is on designing the project as per the urban setting with detailing of services, environmental impacts etc.

## 7. FINDINGS

Issues related to the Architectural Design are as follows:

➢ **Hypothetical sites given to the students leading inability to develop their intellectual skills-**
This enables them to visualize the impact of open space and site constraints on to the built space.

➢ **Students copy the style of fashionable architects without understanding the appropriateness for local context-**
Instructor should give them direction and make them think logically and intellectually.

➢ **Students view Architectural design as an opportunity to express their inner creative motives, rather than as a challenge to resolve technical and social issues-**
Instructor should make them visualize, analyse and think critically towards the social issues.

➢ **Structured Architectural design problem so that students realize what to see and look for in the built and open environment-**
So that students should see the need of the problem and as product they should give effective solutions related to the problems.

➢ **Systematic approach in the contents of Architectural design so that they develop his/her own design-**
Process to product the flow of design should be such that it should follow the motivation, activity, knowledge, application and review.

## 8. CONCLUSION

Teachers and students are shifted from being responders to architectural designs to being the designers of new spaces. The psychology of architecture and environment ignores from educational setting which indicates that culture, resources and management in critical conditions indirectly influencing student learning.

Architecture students are typically encouraged to conduct site visits and walkthroughs of the built environment in order to observe different phenomena. As a result, students do not realize what to see and what to look for in the built environment. The case would be worse when educators attempt to offer students readymade interpretations about the physical world in lectures and seminars leading to student's ability to think critically or develop their intellectual skills. This handicaps their abilities to gather, analyze, synthesis and process different types of information.

Architectural design education is about problem solving. It is largely concerned with the real life situations, important skills which enhanced through experiential learning, research and real interactions which helps in solving the issues related with perception or actual psychological response or how to deal with personal ideas, how to create better living environment and how to deal with problems related to inhabitants.

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