

A Beginner's Mind

PROCEEDINGS

**21st National Conference
on the Beginning Design Student**

Stephen Temple, editor

**Conference held at the
College of Architecture
The University of Texas at San Antonio
24-26 February 2005**

A Beginner's Mind

PROCEEDINGS

**21st National Conference
on the Beginning Design Student**

Stephen Temple, editor

**College of Architecture
The University of Texas at San Antonio
24-26 February 2005**

Situating Beginnings
Questioning Representation
Alternative Educations
Abstractions and Conceptions
Developing Beginnings
Pedagogical Constructions
Primary Contexts
Informing Beginnings
Educational Pedagogies
Analog / Digital Beginnings
Curriculum and Continuity
Interdisciplinary Curricula
Beginnings
Design / Build
Cultural Pluralities
Contentions
Revisions
Projections

Offered through the Research Office for Novice Design Education, LSU, College of Art and Design, School of Architecture.

Copyright 2006 University of Texas San Antonio
/ individual articles produced and edited by the authors

Printed proceedings produced by Stephen Temple, Associate Professor, University of Texas San Antonio.

All rights reserved. No part of this book may be reproduced in any form or by any means without written permission of the publisher.

Published by:
University of Texas San Antonio
College of Architecture
501 West Durango Blvd.
San Antonio TX 78207
210 458-3010
fax 210 458-3016

Library of Congress Cataloging-in-Publication Data

Temple, Stephen, editor

A Beginner's Mind: Proceedings of the 21st National Conference on the Beginning Design Student /
edited and compiled by Stephen Temple

1. Architecture - Teaching 2. Architecture - Design 3. Design - Teaching

ISBN 0-615-13123-9

Reflective Inquiry in Architecture Education: The Place to Begin

ANUBHUTI BHATIA
Florida State University

Introduction

Meaning-making in architecture is a consequence of the interaction of human beings with the built environment ¹. Meaning is not an inherent property of a building. Architecture can provide immense values to the social structure if it responds to social needs, and architects need a theoretical understanding of the way people impart meaning through their values to the physical environment ². This interaction of human beings with the built environment affects every aspect of life – psychological, behavioral, social, and cultural ³. If designers are “master builders”, as the term architect translates ⁴, the behavioral and psychological responses of end users should obviously be their foremost concern. Scholars have emphasized the need for students to realize the importance of the design process, to consider clients’ needs beyond basic functional requirements, and to apply studies of history, psychology, environmental concerns, and human behavior to design concepts ^{5,6}.

These concepts form the basis of this paper. The theory that forms the basis of the concepts presented in this paper is pragmatism in art and art education. In the following sections I will discuss in detail the concept of pragmatism and its application in architecture education. The study that has influenced interpretations in this paper is part of a pilot study conducted for a future extended study. Final year architecture students were interviewed about beliefs about architecture they had brought with them to the field and what criteria they emphasized during the design process. The opinions presented by final year students provided important insights into what they should have been taught at the beginning of their architecture program.

Architecture Education – Its Needs

There is a need for the study of psychology in architecture in order to enhance the evaluation of pre-theoretical personal experiences in the formation of convictions and assumptions during professional practice ⁷. The need for incorporating theories of behavioral psychology and the interaction of human beings with the built environment as important stages in the architectural design process has been emphasized and studied ^{1,2}. Some of the other concerns addressed as being important to design education include professional ethics towards issues of biological, social, and cultural environment ⁸, cultural forces, societal laws, and nature ¹.

The claims that architecture makes should go beyond making sure that the building will be structurally sound and resistant to problems such as leakage ⁹. One ought to be able to take these things for granted and focus on concerns like social, cultural, and environmental issues. This approach would give rise to a refined set of standards for architects. These standards will embrace societal traditions, and reflect the entire society as well as the values of all who are part of the culture. Clearly architecture education needs to go further than basic functions, structural concerns, legal guidelines, and anthropometric data. Architecture needs aspects that relate more to the end user – the occupant who is going to get directly affected physically as well as psychologically by the spaces that these students will design as practicing architects.

Methodology

The study that this paper derives from is aimed at identifying the extent to which architecture schools incorporate concepts of social, psychological, behavioral, cultural, and client

considerations in their curriculum. This paper was based on inferences derived from the analysis of six interviews and observations of their interaction with faculty as part of a pilot study conducted at an architecture program at a state university in a county in Florida. The pilot study focused on deriving an understanding of students' design process and concept formulation.

Sample Selection

Six students were interviewed for this study. All students were seniors in an undergraduate architecture program. The fourth-year studio was chosen for this study because this is the studio in which some serious design process takes place¹⁰. Selecting seniors for the study would minimize trivialization of the study because seniors will be well aware of traditional knowledge and skills¹¹. The six students volunteered for the interviews and were from varied ethnic backgrounds and age groups – one 53 year old white male, one African American female, one half Palestinian male, one half Puerto Rican half African American male, one white male, and one African American male. Except for one student, all students were between 23 and 25 years old. The male to female ratio in the group was representative of the ratio in the entire group. Students came from different towns like Pensacola, Chicago, and a small town in Alabama.

Data Collection

The interview protocol for the semi-structured interviews for the study was developed on two aspects: students' opinions about architecture as a profession, and concerns addressed in the project they were working on at that time. All participants signed consent forms and the interviews were tape recorded and later transcribed.

The interviews were followed by observations of students in their studio and their interaction with each other. I went to the studio five times over the course of a fortnight. Student presentations were postponed three times during these five visits. During the course of the research, two critiques by faculty were held. I participated in both critiques in order to observe the concerns that were being emphasized by students and professors in these critiques. Students presented projects to a panel including their faculty and a guest critic. The presentations were followed by discussion of projects, questions and comments by the jury members. I also sat with students during their discussions with each other, while they were working on their projects, or just waiting for the professors. Each visit to the studio was between two to three hours. After each visit to the studio, field notes were typed from memory and from notes taken during the visits.

Data Analysis

The analysis of interviews with students identified beliefs that students brought to the architecture program. Students talked about ideas they had held when they began their architecture program. Another aspect identified was the concerns that students addressed in the process of design. Interesting themes emerged when the two categories were compared with each other.

Categories that emerged from students' responses to questions about their opinions about architecture as a profession included: (1) sustainability or environmental responsibility, (2) behavioral, (3) social, (4) spatial experience, (5) business aspect and clients, (6) form of building, and (7) reference to other architects (cases). It may be said that students had brought with them an understanding of architecture as a profession that is client-oriented and that should concern itself with the well-being of the end-user and of the environment. They talked about experience and about the environment. Some of the comments included statements like, "(Architecture) is something you experience, not something you just see"; and "An architect can offer a client a great deal in energy savings and economics as well as aesthetics"; "(Architecture) is a way to design people's lives"; and "(Architecture) develops the whole social life of people".

Another set of categories emerged from students' responses to questions pertaining to the concerns they had addressed in their designs. These categories were also derived from students' presentations during critiques and the aspects of their designs which they emphasized when they presented their projects. These concerns include: (1) site context, (2) personal preferences, (3) technical, (4) form of building, (5) culture, and (6) technical skills. Students comments included statements like, "I wanted to do something different."

Discussion

Comparing the two sets of categories that emerged, it is interesting to note that students had ideas that were consistent with what literature suggests architecture education should focus on. However, somewhere during the course of the design process these ideas about client psychology, architecture as an experience, and the responsibilities of architecture as a profession were overshadowed by technical concerns. It is essential to nurture the ideas that students bring to the program in the early stages so that they do not get lost in technical concerns. Students bring interesting concepts about architecture to the program and it becomes the responsibility of architecture programs to ensure that these ideas and concepts are developed further and students are taught to incorporate them in their designs. The solution to this problem lies in a theory in art and art education.

Theoretical Framework

Suggestions for architecture education may be derived from pragmatism and the incorporation of its concepts to fulfill the gaps in architecture education. This section provides an overview of pragmatism in art and art education, and its relevance to architecture education. Pragmatism is based on the effect that art has on its audience – the social, cultural, and psychological aspects of art.

Pragmatism in Art

Art exists in order to achieve certain designed purposes in terms of its effect on the audience¹². Neo-pragmatic art educators identify the pragmatic method of instruction as one through which students can reorient their beliefs towards themselves and the events that they encounter¹³. It goes beyond the impressions brought to the work of art or the first impressions. Therefore, pragmatism may be stated as an approach to art that delves into the meaning that the viewer arrives at after interacting with the work of art. This meaning may include societal and world views, opinions about one's own position in the world, and various other aspects of life, society, culture, etc.

Reflective Inquiry in Art and Architecture

Encouraging students to actively analyze and experience will be a great way of teaching certain concepts¹⁴. The concept of reflective inquiry derives from the pragmatic view of art. Human interaction with a work of art leads the viewer through a process of inquiry based on what he brought to the work, what his experiences with the work led him to believe, and how this interaction influenced his beliefs of himself and of the world. It is the process of reflecting upon one's psyche and how it gets affected at various stages of the interaction that takes place between viewer and art work.

In classrooms reflective inquiry will involve exploring stories from students' lives and experiences, and to explore the relationships between art and the lives of people. The same may be applicable to architecture. Encouraging students to explore their feelings, emotions, and sensory as well as psychological responses in spaces they encounter will make them more aware of the impact that built spaces have on occupants. Just as art is capable of reorienting the viewer's beliefs, architecture is capable of influencing the occupants in a manner greater than

students and architects can perceive without reflecting on their personal experiences in spaces and analyzing these experiences. This approach to architecture education would be a step towards a complete architecture education – education that produces architects geared towards socially responsible designs that respond to more than the occupants' requirements in terms of functionality³.

This reinforcement is extremely important in the beginning semesters of their program. Students will be able to identify their ideas about architecture, explore these ideas and beliefs in detail, and analyze these beliefs. Students will be able to identify a theoretical framework within which they can place their beliefs about architecture and design. This approach, I believe, will also introduce students to research and theoretical studies and reinforce theory in architecture as being equally important to design.

Conclusion

Encouraging reflective inquiry among first year students will orient them to the extent to which their designs influence the end-users. It will ensure that ideas that students bring to architecture about the responsibility of architecture towards clients and environment are nurtured. Students can be encouraged to recognize their ideas, their importance and their incorporation in design. It will ensure that architecture schools produce graduates who are committed to designs that acknowledge clients' social, cultural, psychological, and behavioral needs; and address environmental concerns. This should be an important aspect of architecture programs. In fact, I believe that it should be the first step in architecture education – it is the place to begin.

REFERENCES

- 1 Rudd, William J. "Architecture education: the profundity of edifice," *Integrated Liberal Learning and Professional Education (New Directions for Teaching and Learning)* 40 (1989): 21-29.
- 2 Honikman, B. "Toward a new history of architecture," *Design and Environment* 6(2) (1975): 25-27.
- 3 Bhatia, Anubhuti. "Form follows function: Pragmatic functionalism in interior design," Paper presented at the South Regional Conference of Interior Design Educators Council, High Point, NC (November, 2004).
- 4 Kay, J.H. "Architecture education: Needs a new blueprint," *Change* 7(5) (1975): 34-38.
- 5 Kosidowski, P. "Building a foundation: Architecture education and writing pedagogy," Presented at the 47th Annual Meeting of the Conference on College Composition and Communication, Milwaukee, WI. (March, 1996).
- 6 Gommel, J. "Wayfinding: You are here/you are there," In *Eyes on the Future: Converging Images, Ideas, and Instruction. Selected readings from the 27th Annual Conference of the International Visual Literacy Association*, Chicago, IL. (October, 1995).
- 7 Rambow, R. and Bromme, R. "Implicit psychological concepts in architects' knowledge – How large is a large room?" *Learning and Instruction* 5 (1995): 337-355.
- 8 Findeli, A. "Rethinking design education for the 21st century: Theoretical, methodological, and ethical discussion," *Design Issues* 17(1) (2001): 5-17.
- 9 Esherick, J. "Verbalization and visualization: A need in architecture education," *Journal of Architecture Education* 38(1) (1984): 26-28.
- 10 Demirbas, O.O. and Demirkan, H. "Privacy dimensions: A case study in the interior architecture design studio," *Journal of Environmental Psychology* 20 (2000): 53-64.
- 11 Sancar, F.H. "Behavioral knowledge integration in the design studio: An experimental of three strategies," *Design Studies* 17(2) (1996): 131-163.
- 12 Spiegel, L. *Theories of art*. Retrieved March 4, 2004 from http://reitary.org/art_theories/theories_of_art.html (1998).
- 13 White, J. H. "Pragmatism and art: Tools for change," *Studies in Art Education* 39(3) (1998): 215-229.
- 14 Livingston, K. "When architecture disables: Teaching undergraduates to perceive ableism in the built environment," *Teaching Sociology* 28(3) (2000): 182-191.