Material and Form

Matthew Larsen

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Accademia di Architettura

Valerio Olgiati
Martino Pedrozzi

Jaen Holt, Chair

Paul Emmens

Jonathan Foote
Abstract

This thesis is the search for clarity in the relationship between essence and appearance, construction and form, necessity and possibility, object and subject. It is a reflection on the question of the nature of building.

I cannot tell you that something is beautiful. I can only explain why I do what I do, and how I do it. I have tried to limit the text to a minimum, because architecture is not about words. Text is added to clarify an idea.

The project is a bank made with brick in Old Town Alexandria.
I would like to thank my family, Timo Lorenzen-Schmidt, Winson Wong, and Chuchina Choi-Mj, this would not have been possible without your support.

A special thank you to my teacher of architecture, Valerio Olgiati.
Introduction

House in White was designed by Kazuo Shinohara and built in 1966. The plan is square with a column in the center. From the outside it appears symmetrical, with the roof peak in the middle, angling down to the four corners. Inside, the column is no longer in the center. The space has been divided to fit the program of a house. It is the fragmentation of space, yet interactivity, the whole remains.
Monte Albán is located in Oaxaca, Mexico. The ancient Zapotec people simply chopped the top of the mountains off and built their city. The valley is below, with a view of the crown of the trees. The city is built so that the view is to the sky. The manipulation of nature gives it a strong physical presence, but it is the vertical orientation which creates another world.
The Monadnock building was designed by Burnham and Root, and built in 1893 in Chicago. It is one of the last load bearing masonry buildings with multiple stories. At the base, the wall is seventy two inches thick, and then tapers to thirty inches at the top. This idea is even emphasized at the corner, where it begins to round as it rises. It is not an aesthetic solution, but the result of a structural idea.
Design

The facade is the result of a tectonic expression of brick. The idea was to create a bearing wall, which is two feet thick from the bottom to the top. Since the surface area at the base has to be greater than at the top, the brick wall tapers, folding at the corners and becoming straight at the top. In order to resolve the corner condition so that it did not resemble an angle, the design was seen as a wall, which means that while the lower plate has an acute orientation to the outside world, they all share the same square footage. Elevators and stairs are embedded into the three feet, three inches wide walls, seeming any structural expression. There are no interior supports. The brick walls transfer the load to the earth. The ceiling height on the ground level is thirteen feet three inches, while on the top level, it increases to eleven feet. Each successive level has one course of brick at the window jamb. This horizontal push as you ascend leaves an apparent on the top floor. There, the ceiling changes, relating to nature on a larger scale. A flower pattern is created above the ground level and surrounded with a brick wall. A path connects the two elements and shows a sense of unity and contrast to the brick.
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Unless noted otherwise, photos and works are by the author.
Vita

Matthew Larsen

Education

Master of Architecture
Wright Polytechnic University Institute and State University

Exchange Program
Accademia di Architettura Università della Svizzera Italiana
Atelier Valentio Gigliati

Bachelor of Science in Architecture
University of Utah

Experience

Eugene Reagig Architecture
Atelier Pagnamenta Torriani

Honors Publications

Interschool Design Competition
Urban Market
First Prize

Virginia Polytechnic University
Solar House Competition
Special Prize

Accademia di Architettura
Student Activity Report
Atelier Valentio Gigliati

Virginia Polytechnic University
Thesis Project
Crystal Award