MEDIATION

BY

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ABSTRACT

This thesis is an investigation of architecture in terms of its importance to individual and cultural understanding of context and belonging. Architecture should be viewed as more than a mark on the landscape; it is a critical element of identity enabled through a continuous process of discovery, learning, and growth as a function of sensory perception.

The project used to illustrate this thesis is the Roanoke Catholic School at the crest of St. Andrew’s Hill in Roanoke, Virginia. St. Andrew’s Roman Catholic Church serves as an important landmark in the city; therefore, the new school must contribute to the site and enhance the presence of the church as viewed by the residents of Roanoke. Likewise, the design of a private school which accommodates grades pre-Kindergarten through 12, provided the opportunity to show how the built environment may reflect varying needs of students as they grow, intellectually and physically, and the development of a sense of community in the school.

Architecture becomes an active participant in the lives of people both inside and outside of its specific content.
To my wife Christy.

Thank you for my family and for making me a better person than I otherwise could have been.
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INTRODUCTION

Architecture is the manifestation of the innate desire to establish identity and locate a position in the world. It is the end result of a process which seeks to reconcile dynamic relationships between people, ideas, and the environment. It is a primary means of uncovering a culture's functional, expressive, and spiritual values.

It is not possible to fully understand any work of Architecture without first understanding the specific context within which it has been constructed. It has specific responsibilities and a reality upon which it must, from its inception, operate.
To the environment, Architecture has the responsibility of belonging. It starts with the discovery of a specific need in a given context and is realized when the work becomes an integral and necessary addition to the site. The need is translated by the Architect into a statement of place that allows itself to identify and be identified. It serves a designated function while maintaining a proper relationship with the environment that enables a constant awareness between the earth, the sky, the mortal, and the divine. This, in turn, leads to individual and collective experience, knowledge, and growth.

Architecture has the unique ability to show its relative importance in the community responsible for its construction. Location, form, scale, technique, materials, proximity give the clues essential for the interpretation of cultural significance. The structure stands on its own; needing no explanation, no justification. It becomes a statement of clarity and correctness; each component having been carefully chosen through a continuous process of discovery, coming together to form a single, meaningful whole.

For the individual, Architecture should have a clear and specified purpose which transcends the pragmatic and functional requirements of building. It must possess a timelessness and a permanence elevated beyond the physical properties of materials to a more significant and lasting place in the identities of people. The philosophy of Heidegger, and the writings of Juhani Pallasmaa and Christian Norberg-Schulz have been centered around the importance of place and the necessity for human identification which occurs only after their relative location and position in the world have been defined. Towards these ends, it is a goal of Architecture to provide these places and to allow the opportunity for personal expression of ideas and emotions within defined space.

1. Martin Heidegger describes the allegorical process of personal experience, knowledge, and growth as a function of human understanding with relation to placement on the earth which is an impertinent and flawed representation of divine existence above and beyond the earth. This “mirror play of the earthfold” becomes an essential element in the development of individual an cultural identity.
Any structure which meets the elements of the program without maintaining a relationship to the environment is doomed to suffer the same fate of buildings which quickly outlive their purposefulness and are ultimately discarded for lack of interest and lasting importance. Likewise, a building which provides only a solution to the site while neglecting the realities of human interaction within a space has failed the same individuals upon which it depends. Architecture is then replaced with static structure, which has only the limited ability for necessity, but loses any hope of spiritual or emotional fulfillment.

Architecture is the mediator. Defining place and space, facilitating understanding, it operates at the two scales of human interaction. It provides an essential backdrop which ties a community together in a shared experience while allowing for individual development and the search for an identity within the whole.
CONTEXT

St. Andrew's Hill in Roanoke, Virginia was permanently marked in 1906 with the completion of St. Andrew's Roman Catholic Church. The Church served not only as the early religious center for the Roman Catholic Community in Roanoke, but more importantly, its prominent location on the hill has made it a source of orientation for all residents of, and visitors to, the city.

The view of the church from the North edge of the city, which has fallen into relative disrepair and is seldom traveled, is the most pure and uninterrupted. The more common view of the site is from the adjacent interstate where traffic flows at a steady 65 MPH pace allowing only partial glances at the landmark.

The development of the hill around the church over the past one-hundred years has been fragmented and disorganized. Buildings differing in style, size, and use have obscured the unity of the hill; blocking the views and relationship between the site and the city. As construction of new buildings on the hill continues, it becomes more clear that there has been little effort made to develop an integrated plan for the site that poses a solution to the program as well as an awareness of its proximity to the church as the visual center of the hill.
The Catholic school which occupies these buildings at the crest of the hill has similar organizational and identification problems on a different scale. With a maximum enrollment of 560 students, grades pre-kindergarten - 12, it has barely managed to keep pace with spatial requirements in the existing facilities.

The upper school, grades 8 - 12, and the lower school, grades PK - 7, currently occupy two separate buildings at opposite ends of the site. Each building has minimal class, administrative, kitchen, cafeteria, and recreational space. However, the main functions of the school’s central administration are disconnected, many are unnecessarily duplicated, and there are few suitable areas owned by the school for groups of more than 20 students to meet during the course of the school day for either a large class or outdoor recreational activities. Minimal space has been given to students to gather in the halls or to meet in small groups inside the classroom. Therefore, students have been forced through the inadequacy of the buildings to make use of otherwise unsuitable areas for socializing or study between classes.

The existing condition at the top of the hill shows the lack of adequate outdoor facilities for students as they break from their daily schedule. The “mall” area is shared by all grade levels and is surrounded on all sides by school and church parking; creating a claustrophobic and hazardous recreational situation.

Due to the lack of spaces in which students may meet during the course of the school day, students are forced to make use of otherwise unsuitable areas in corridors or on window sills.

The most beneficial aspects of the small school have been lost. Students separated by more than a few grade levels have little opportunity during the day to meet and interact. Thus, the basic fabric which ties the small community of students together is weakened.
Recently, some of the older buildings on the site have been removed to clear the way for a new multi purpose facility to be located on the South-east corner of the site. While the new building will consolidate the school's central activities and add a few more classrooms, it fails to adequately address the more critical architectural elements of context, content, and identity.

The new addition does not do enough to change the trends set forth by the existing buildings on the hill. First, by further isolating the school from the context of the city, it wraps around the site to make a physical connection between the two misplaced and generally unappealing existing buildings. Second, the interior spaces fail to resolve the issues of student activity between the hallways and the classroom; leaving the students constantly searching for areas to interact within the school. The character of the new building has been reduced through "value engineering" and short-sightedness to a point in which it has no visual continuity, little character, and ultimately only adds to the existing amalgamation of buildings on the site.

By orienting and rotating the building's main entrance toward the inside of the hill, the building, like the others currently on the site, leaves minimal space for recreation, and in essence, turns its back to the city. Only modest attempts have been made to recognize the position of the school with respect to the city.
The goal of any new building or buildings to be located on St. Andrew's Hill is to assume the role of mediator between the church, the city, and the occupants of the hill. It must resolve and construct solutions to the problems that have been forgotten by the current condition. The work must create and maintain a physical and visual relationship in which the building becomes a necessary and indispensable part of the site; a work of Architecture. It must provide a suitable environment for its occupants elevated beyond the satisfaction of the program to one in which the exterior spaces, the classrooms, the offices, and the activities within its halls becomes an integral part of the process of education, community, and personal development.

This project will present an alternative to the site. This thesis will attempt to show that Architecture is more than the various materials which compose a building. Here, permanence in architecture is elevated beyond the physical properties of concrete and steel to a place in which it is the opportunity to construct a solution greater than the sum of its parts; a solution in which architecture has the innate qualities that define the experience of place.
The project for the new Roanoke Catholic School begins with the idea that any building on the site should be placed as the mediating element between the church and the city. The building must facilitate the presentation of the church to the city as well as provide adequate pedestrian spaces in the mall at the base of the church.

The development of an integrated work on the most prevalent and commonly viewed shoulder of the hill provides the opportunity to accentuate the vertical form of the church with the horizontality of the school. Vehicular traffic has been eliminated from the interior grounds of the school, defining additional outside recreational spaces on multiple levels which support activities for students in various grades.

While the body of the school is aligned on a primary axis, secondary, lateral axis' pass through the school providing a physical connection between the interior grounds of the school and the city.
The school maintains a low profile on the hill, not rising above the main floor area of the church. The scale of the building, having been reduced to accommodate a number of interior spaces in the school, creates a hierarchy of materials, styles, shapes, colors, and degrees of opacity. The projection of this organized plan into the elevations of the school allows for variety in the articulation of exterior sections.
CONTENT

The decision to integrate all of the facilities necessary for the school into a single work located on the South side of the site required that the organization of the school allow for a wide range of interior spaces; large enough for several classes to meet at once yet small enough to accommodate a single 5-year-old. The differentiation of three layers of squares into primary structure, secondary auxiliary spaces, and tertiary enclosure defines a hierarchy of materials and space enabling the delineation of specific use areas and realms within the school. Each layer guides the placement and size of walls, columns, and subsequent openings for doors, windows, display cases, tack-boards, seats, lockers, and desks. This gesture provides the students with any number of activities within the school outside of being either in the classroom or in the hall.
Mario Botta's design for a middle school in Morbio illustrates the use of the organized plan to break down the overall scale of the structure into smaller components that are more easily managed by its students. The subsequent plan allows variety in the size and shape of each classroom and common areas at the end of the central hallway.
The school is a community. It may be argued that the interaction and activities that occur outside of the classroom and in the halls before, between, and after class is more important in the development of students than what is learned in the class. As school itself provides the education and opportunity for future excellence, it is not unreasonable to ask that architecture provide a suitable setting for school and the pursuit of human experience.

As with any community, there must be a separation between what is public and what is private in order to enable both the sense of belonging and security within a given setting.

The public corridors and spaces of the school open up to become "interior streets". The distinction between the inside and outside is minimized as light, sounds, distinct views, and groups of people moving with a common purpose are connected not only by physical proximity, but also by their presence in a common place.

The threshold between public and private provides the opportunity to stop, sit, socialize, and relax. While in the public realm of the building, and provided for by the organization of the plan, it offers spaces where individuals and small groups of people may pause and prepare for movement into one of the adjacent spaces without being rushed and without compromising the relative security of the private space.
The classroom is designed around the needs of the individual and must provide the students with the security necessary to make mistakes and learn.

While each classroom is organized in terms of a relationship with the whole school, its separation from the public realm of the building presents each class of students with the opportunity for their classroom unique and personal without interference from the public. An offering is made to the adjacent space. The organization of the plan provides areas to display class work, art, announcements which identify the place and progress of the classroom with respect to the whole school.

Connected to, but not directly associated with, the primary class spaces are smaller, secondary teaching and study spaces within which smaller groups of students may concentrate on individual lessons and assignments. In these areas students may progress at their own pace relative to the teachings of the entire class, and may possibly be treated to books, games, or creative activities as a reward for hard work in the class.
IDENTITY

The role of architecture is not to determine the methods by which lessons are passed down or to construct physical solutions to the increasing problems in schools. Rather, it is to provide an environment in which learning occurs not only in the confines of the classroom by the teachers, but is elevated by the architecture of the school into a continuous process of experience and discovery as a function of sensory perception outside of the formal classroom setting.

As the nature of education continues to be redefined by changing social conditions, it is essential that the buildings in which education takes place reflect the needs of the individual and the community of students. It is not appropriate for perpetually overcrowded, antiquated buildings to be replaced with trailers, “mobile classrooms” or any other form of quickly built and cheap structure. The design of the school must incorporate the whole phenomenon of learning at the scale of both the context and the content, and must not be relegated to a secondary position behind the desire to provide only more teaching spaces. It requires a process of integration and growth and an awareness that the environment is a critical element in the establishment of identity.

View of downtown Roanoke from interior street of school.
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