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MASTER OF ARCHITECTURE

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Design Thesis

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STATEMENT

The era of modernization has transformed the world into a universal culture striving to conventionalize mankind, imperceptibly diluting the relationship between man and the natural environment. This phenomenon, when imposed upon the human habitat, encourages a sense of "placelessness." The failure to recognize social and environmental diversities produces an inappropriate architecture.

It is imperative that man examine the accumulative impact of universalization. I intend to prove that mankind and his created tectonic forms are enriched when the concept of "regionalism" is integrated into the modern idiom. I intend to propose three issues which clarify my thesis: first, the significance of vernacular architecture and its relationship between the past and the present; second, the importance of social values and how they determine architectural continuity; third, the promise of the land to provide a "place." The acknowledgment of these issues will uncover a "spirit" and architecture appropriate for our time.
The evolution of technology is rapidly changing our society. Instant communication, rapid mobility, and computers are slowly shrinking the distances between space and time. These constant changes are providing infinite numbers of possibilities, however, producing an environment which offers little diversity or real choice. Infinite possibilities encourage a search for standardization of principles which impose common principles upon diverse regions, thereby diluting the ability for regions to maintain a sense of identity. Amos Rapoport proposes the concept of "criticality,"¹ in which the mass production of materials and ability to transport materials throughout the world produces a physical environment of "low criticality."² Building forms are no longer constrained by climatic, limited material, and technological factors; instead, they are limited by individual self-imposed constraints. One could argue that the freedom of "choice" has created a chaotic environment, whereby the need to express "individualism" has overwhelmed the need to contribute to a "pluralistic" environment. As a result:

"The clear hierarchy of primitive and vernacular settlements is lost, reflecting the general loss of hierarchies within society and all buildings tend to have equal prominence. The desanctification of nature has led to the dehumanization of our relationship with the land and the site. Modern man has lost the mythological and cosmological orientation which was so important to primitive man, or has substituted new mythologies in place of the old."³
The Modern Movement has developed a universal language with a palette of new materials, new procedures, new technology, and yet repeated criticism of this movement stems from the forgotten importance of what Rapoport refers to as "the mythological and cosmological orientation" and what Ricoeur describes as "the ethical and mythical nucleus of mankind." It is these concerns which advocate the need to integrate "regionalism" into Modern architecture.

This thesis does not suggest a return to pre-industrial building technology, but that we investigate the regional morphological forces which provided continuity in the past and determine how these forces apply in the Modern idiom. The search for the "ethical and mythical nucleus of mankind" is directly linked to people (their folklore), the natural environmental conditions, and the composition of the land.

We have recently experienced an architectural movement which looks to the past for inspiration for the future. The assumption behind any historical approach is that "it is of value philosophically as well as in making aware of the complexity and overlapping of things." The element of "time" is constantly changing; however, the reoccurrence of natural cycles assures us that modern man will encounter similar environmental conditions as experienced in the past. As Christian Norberg-Schulz writes,
"man lives in 'time'... he lives with the rhythm of the day and night, with the seasons and in history. Therefore, if we are to learn more about the "day and night" and "seasons," it seems appropriate to refer to the immediate built environment for historical reference. In particular, pre-industrial vernacular forms which were built "of the soil" and weathered the test of time.

Vernacular architecture is significant not only because it reminds us of our heritage, but provides a model for modern day exploration. As Rapoport explains:

"The model is a result of the collaboration of many people over many generations as well as the collaboration between makers and users of buildings and other artifacts, which is meant by the term 'traditional.'"

The vernacular forms were usually designed by craftsmen, built with local techniques, local materials, and with the local environment in mind. These indigenous builders, as J. B. Jackson writes, "rarely accepted innovation from outside of the region" and were "little influenced by history in its wider sense. That is why the word 'timeless' is much used in descriptions of vernacular building."

Vernacular buildings range from domestic structures such as houses, farm buildings, barns, stables, granaries, and could also include industrial forms such as mills, kilns, and factories. The forms and spaces were "a direct response to activities, local conditions and cultural imperatives." Rapoport sums up the objectives of the vernacular builder as:
"Working with the site and micro-climate; respect for other people and their homes and hence for the total environment, man-made as well as natural; lack of abstract theoretical or aesthetic pretentions; and working with an idiom with variations taking place within a given order."  

Vernacular forms are significant as reference models, when one understands the regional determinants which shaped the forms. More specifically, the use of indigenous materials, methods of construction, attitude toward local light, siting of structures and spaces which form the attitude of being "right with the earth." Such qualitative analysis is useful to modern man when one understands and acknowledges the morphological forces which existed in the past. It is less successful when used as a means to imitate or duplicate a particular style. As Alvar Aalto states:

"Nothing old is ever re-born. But it never completely disappears either. And anything that has ever been re-emerges in a new form. It seems to me that at the moment we are striving toward a whole."

It is the concern for the "whole" which leads to developing an understanding of the relationship between people and their landscape. As J. B. Jackson writes:

"No group sets out to create a landscape, of course. What it sets out to do is to create a community, and the landscape as its visible manifestation is simply the by-product of people working and living, sometimes coming together, sometimes staying apart, but always recognizing their interdependence."

This implies that we "recognize other people as inhabitants of the earth as well as members of a social order." The meaning of "social order" may have deep roots which have been passed down through generations, or
simply an acknowledgement that one is a member of a community. For example, John Stillgoe describes a "raising day" in which a collection of neighbors, primarily farmers, selected a day to erect a structural wood frame for a barn. This was an "event," neighbors combined their efforts to erect "traditional shapes" that fit into a "whole everyone understood." This example of collective "spirit" provided not only social continuity but visual continuity as well. As Stillgoe writes:

"He and his neighbors built the structures themselves, without 'foreign' help. If his house and barn were like the neighbors' structures, so much the better. His conformity displayed his solid position in the community, his willingness to abide by unspoken architectural - and social - ground rules."

The presence of an actual "raising day" is rarely experienced in the modern day. However, the "spirit," the individual obligation to enrich the community (or landscape), has value today.

It is, therefore, important to recognize the "socio-cultural" relationship between modern man and the landscape. Without shared social values, the modern landscape becomes visually chaotic. As Rapoport writes:

"In traditional Japan, for example, the separation of domains results in each house being isolated and each household doing what it wishes, as long as common values are shared, variations in house forms with an order produce good results. Once the shared values disappear or are weakened, the same attitudes produce the visual chaos of the Japanese city today."
The relationship between tectonic form and the landscape is a major factor in determining "socio-cultural" order. The landscape is the physical manifestation of social values, when "common values are shared," the relationship between the landscape and social values provides architectural continuity.

The modern day realization of universalization has de-emphasized the need for shared values, has encouraged a form of "individualism." We have, as Moshe Safdie suggests, "put a great deal of energy in defining the individual goals and securing the rights of individuals to set their own goals." The "securing the rights of the individual" is not the primary concern, but what has physically evolved out of these individual rights is important. Communities filled with monotonous forms, derived from standardized procedures, expressing and relating to a universe which has no meaning. The common response to this "meaningless" phenomenon is to create novelty for its own sake, the desire to impress or impose an artificial meaning into a built environment. Perhaps an alternate, more ethical approach, as J.B. Jackson writes, is to "discover the laws of nature and follow them; we can then lead secure and creative lives and contribute to the well-being of the earth and its inhabitants."

The impact of the phenomenon of "universalization" has re-awakened the fundamental need for man to identify with and live in a meaningful environment. Christian Norberg-Schulz addresses this need:
"Man dwells when he can orientate himself within and identify himself with an environment, or, in short, when he experiences the environment as meaningful. Dwellings therefore implies something more than 'shelter.' It implies that the space where life occurs are 'places,' in the true sense of the word."[22]

The natural composition of "places" are created as a result of acknowledging the local resources, and cosmic laws of nature, and communities are identified by these acknowledgments. The identity of a place is "determined by location, general spatial configuration and characterizing articulation."[23] Its character depends on "how things are made."[24] Historically, it suffices to point out that the local indigenous builder envisioned his environment as having a distinct character. He captured the "spirit" of the place by recognizing the vitality of the region, acknowledging the fundamental geological, topological, and environmental factors which exist at a given site. Then adapted to these factors in built form, a direct local response to the way of life, climate, materials, and technology. The result is what Kenneth Frampton describes as "inlaying the building into the site."[25] The building portrays a meaning beyond "functionalism"; it becomes integrated into the site, as opposed to transforming the site to fit standardized building techniques.

Rapid technological advancements and the standardization of building principles allows modern man to build a prototypical building in various climatic conditions. The result "is the problem of excessive choice, the difficulty of selecting or finding constraints which arose naturally in the
past and which are necessary for a meaningful house form."²⁶ This "excessive choice" fuels the issue of "aesthetics," devaluing the issues of appropriate forms and materials which are sensitive to the local conditions. There are cases of "hostile regions" (e.g., desert, ice) which require adaptive building materials and techniques to ensure protection and stability while other regions with less hostile conditions encounter the freedom to adaptively dwell intimately with nature.

Tectonic elements, when properly exploited, interconnects the man-made and natural environments. The window, "perhaps the most delicate point of which natural forces impinge upon the outer member of the building,"²⁷ when standardized and reduced to a stationary position, restricts the dynamics of air and light, devaluing the interaction between internal and external forces. The foundation, the link between earth and built form, when unconditionally standardized, produces similar repercussions, as Frampton writes:

"The bulldozing of an irregular topography into a flat site is a technocratic gesture which aspires to a condition of absolute 'placelessness,' whereas the terracing of the same site to receive the stepped form of a building is an engagement in the act of 'cultivating' a site."²⁸

Building principles which neglect the inherited qualities of nature, dilute the cosmic relationship between man and natural environment. As Norberg-Schulz comments, "Lost is the settlement as a place in nature . . . Lost is also the relationship to earth and sky."²⁹
The act of "inlaying" and "cultivating" a site produces a bond between man and nature, provides continuity between the land and built form, and provides the origins of a sense of "place."

The concept of "regionalism" in architecture transfers the emphasis of architectural values from "universalization" to a "region." It emphasizes unity through the exploitation of regional dynamics such as climate, materials, construction techniques, life-styles, and economy. It ultimately prospers on the "love for one's place."

"Region is an idea ... Region is the geographic area where a population with common ties spends its days and nights ... A region is in peace and prosperity within itself when it is in harmony with the external world. Successful regions are self-sustaining and self-sufficient. In these regions the "natural" and the "man-made" exist in harmonious balance; regions are the geographic areas where people feel the highest degree of 'topophilia.'"  

Regionalism was prevalent during the early days of the Modern Movement. Such notable architects as Frank Lloyd Wright, Walter Gropius, and Marcel Breuer were bending modern principles to accommodate local conditions. As the movement evolved into the "international style," the integration of regionalism became less evident. When the international design principles began to materialize throughout the world, it became apparent that something was missing -- "a loss of place."³¹

The aspiration for a sense of "place" re-awakens the need to integrate "regionalism" into the modern idiom. The "second phase of modern
architecture\textsuperscript{32} challenges modern man to integrate the two principles to form a meaningful environment. This need has existed since primitive man, the desire to utilize the technology of its "time," to transform the earth into a habitat, whereby man fulfills dreams and identifies with the natural environment. As Norberg-Schulz writes, "we dwell poetically when we are able to "read" the revealing of things which make up the environment."\textsuperscript{33} A poetic environment is realized when "we" is the primary issue; such cooperative values materialize into a meaningful existential form, whereby man gains identity and comes to terms with the "spirit" of the "place."
REFERENCES


2. Rapoport, ibid.

3. Rapoport, ibid, pg. 126.

4. Rapoport, ibid.


6. Rapoport, op cit, pg. 11.

7. Rapoport, op cit, pg. 6.

8. Jackson, John B. Discovering the Vernacular Landscape; Yale University Press; New Haven; 1984; pg. 85.


10. Rapoport, op cit, pg. 5.

11. Stillgoe, John R. Common Landscapes of America 1580 to 1845; Yale University Press; New Haven; 1982; pg. 149.


18. Rapoport, op cit, pg. 46.

19. Rapoport, op cit, pg. 73.


22. Norberg-Schulz, Christian; Genius Loci; Rizzoli; New York; 1980; pg. 5.

23. Norberg-Schulz; ibid, pg. 179.

24. Norberg-Schulz; ibid, pg. 15.


27. Frampton, op cit, pg. 26.


31. Norberg-Schulz, op cit; pg. 140.

32. Norberg-Schulz, op cit; pg. 195.

33. Norberg-Schulz, op cit; pg. 169.
PROGRAM: A Learning Center

The Learning Center is envisioned as a place where people from throughout the world can gather and learn more about worldwide agricultural issues, primarily in underdeveloped nations. The program will be coordinated and built for Heifer Project International. H.P.I. is a nonprofit organization which offers livestock aid to impoverished families overseas and in the United States. Its goals are to sensitively improve nutrition and livelihood by providing improved genetics, training, and technical help for various cultural needs. The organization aspires to what Archimedes once said centuries ago, "Give me a lever long enough and base on which to stand, and singlehanded I can move the world."

Site: The proposed building site is located in Perryville, Arkansas, forty miles west of Little Rock. It lies on a 1200 acre ranch, partially bordered by the Fourche La Fave River.

Building Requirements:
- Visitor's Information Center
- Auditorium
- Classrooms
- Library
- Dining Hall
- Kitchen
- Exhibition Hall
- Sleeping Accommodations
  (30 people -- including host couple)

Total Building Area 18,000 sq. ft.