The Industrial Paradigm
“...the experience of each new age requires a new confession, and the world seems always awaiting its poet.”

*Ralph Waldo Emerson*
Examination of Reasoning

With the assumption made that the term *vernacular* is more of a description of a thought process than a category of building style, the next step towards the understanding of this process is to come to some conclusion as to the reasoning used in vernacular design. This study will only attempt to describe the two broad general types of reasoning: deduction and induction. It will also attempt to indicate that the method prominent today is not the same as was used by vernacular builders and why this shift occurred.

Deductive Reasoning

The deductive process begins with a general statement from which particular information is then deduced; a hypothesis is formed from which implications are deduced to determine its truth.

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\text{if } H \text{, then } I \\
\text{not } I \text{, therefore not } H
\]

This process is quite suitable for questions with pragmatic or logical answers. However, this method is difficult, if not impossible, to use where tangible evidence is lacking. The artistic part of architecture happens to be one of these areas. Many of the decisions made by designers, when held up to logic, have no tangible foundations. The various –isms in architecture are attempts to create principles and rules of order that would lead to a logical resolution to a design opportunity. Paradoxically, those principles and rules of order have their base in something other than pure logic, the inclinations that lead them being based in social or cultural constraints.
Inductive Reasoning

The inductive process follows a nearly opposite approach. Here, a number of cases are observed and inferences made pertaining to those cases that lead to a generalized conclusion.

in X cases, A & B occurs therefore, in similar cases A & B will also occur

But, the conclusion follows logically only in the domain of A’s and B’s actually observed. This method is solely based on the circumstances surrounding the specific observations, and it does not logically follow that, in another set of observations, the same general inferences will be made.

Contrary to the strict ‘if this, then that’ statement of deduction, the inductive method allows one to develop generalizations that take into account the conceptions and proclivities of the individual observer. Each individual views and analyzes a set of information in different ways depending on their knowledge and experiences. Thus, rendering different generalizations from the same data.

It is understood that deductive or inductive reasoning cannot exist alone. Both must occur at the same time and rely, to a great extent, on the other’s information. However, the importance of the role that inductive reasoning plays on design cannot be over stressed. That importance lies in its lack of boundaries and its unique ability to bring forth from the individual mind that which cannot be produced by anyone else.
The vernacular mentality was based heavily in inductive reasoning. This is a result of a method of analysis that was based on many observations pertaining to Nature, other built environments, culture, etc. It is also, in part, due to a lack of formal education in scientific methodology. Acceptable forms used in their buildings were, for the most part, due to pragmatics, as was the development of their culture itself.

As science progressed, so did industry and specialization until the individual’s responsibility was narrowed to a few tasks or events. During this process of change, education took a new course. Formal education became the prominent source of knowledge and apprenticeships began to die out. For the first time in history it was possible to learn, then do, instead of learning while doing. A good example of this can be seen in the Beaux-Arts approach to architecture education. While it is true that the ‘learn while doing’ aspect was still a large part of this system, it is easy to recognize the influence of deductive reasoning on the layout of this system of instruction.

The architectural result of this progress was the shift to a more intellectually conscious, deductive approach to design. We see this change in the various attempts at categorizing architecture styles. This is a result of the dominance of deductive methods used in formal education.

The eventual result of a more deductive approach to architecture was a move to stan-
standardization. Carried over from the efficiency of the factory assembly line, standardization of building materials became increasingly important. This eventually led to attempts at standardizing entire buildings. There are few examples of success from these approaches, with the mobile home being the one exception that has endured due to its economic feasibility. They were, and still are to a great extent, designed with the production system of manufacture being the primary concern. Even with the lack of successful examples to draw from, attempts are still made to standardize the process of building, but the successes have been limited to the field of management, not architecture.

The main reason for this is the way the human mind views its surroundings. In industrial manufactured housing, the individual must adjust to the needs of the built environment. This is in contrast to the vernacular thought of adjusting the surroundings to meet the needs of the individual.
During the process of industrialization in architecture, the nature of the vernacular, that exists only in the handmade, was lost. Standardized materials and forms lack the spontaneity of one-off creations. This is especially true in architecture where the quality of space depends greatly on how the mind accepts its surroundings as either unique or ordinary due to what is accepted as the ‘norm’.

The essence of vernacular quality lies in the necessity of its existence and the creative evolution of its spaces. All works of architecture undergo a continuing metamorphosis with the passing of time and the changing needs and desires of owners and functions. Vernacular architecture cannot be explained without first examining the evolutionary process that comes to bear on these structures through time. This is an inherently anthropological approach to this study, but it is one that will bear the rewards of understanding and lead to new design methodologies.
Many architects have attempted to regain the elusive quality of vernacular architecture with mixed results. Some have developed wonderfully picturesque structures such as those created at Wynne- toon by Julia Morgan (fig. 38). Others have had less success and have created buildings that exude a fakeness that is almost palpable. These attempts have been mostly focused on traditional forms and shapes that, as has been mentioned earlier, were contrived from a different mental focus and reasoning. An academic approach to vernacular design will seldom render a design of the same quality as those undertaken with vernacular constraints.

This is not to say that architecture of high quality has not been nor cannot be produced through academic attempts. Obviously, there are a number of cases that can be cited. But, even in these instances, the approach has normally been heavily laden in romanticism and picturesque qualities.
Figures 39 & 40 are examples of attempts to recreate the vernacular using very strict deductive reasoning. The results are simply decorative and they become an ornament to their surroundings instead of buildings with their own reasons for existing.
The Riley House (fig. 41 & 42) not only succeeds in the balancing act between adding to its surroundings in a positive way, and still attaining an individuality lacking in Figures 39 & 40.
Conclusion

Some attempts at conducting research to describe the vernacular today have based their explanations on industrially manufactured buildings such as mobile homes or the pre-fabricated buildings now found on most farms. But there is an error in this approach to the explanation of vernacular architecture. A pre-fabricated building cannot be considered a vernacular artifact due to, not only the manner of its creation, but also the reasons for its existence.

These same structures, viewed a decade or so later when the accoutrements of the vernacular begin to take their places in and around these structures, changing the nature of the building itself, can very easily be considered vernacular architecture.

Vernacular architecture is not a ‘thing’ or an ‘object’ as much as it is a process of evolution.