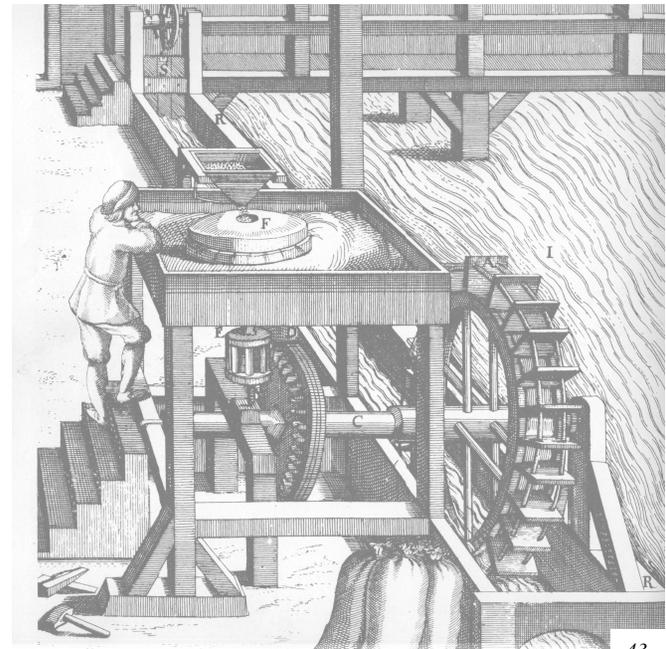


Project

“In the art of building, an intelligent and expert carpenter is entitled to the foremost place, or the first degree of eminence; for he is able to erect a house without calling in either the bricklayer or mason, neither of whom can execute the like task independent of assistance. His profession depends on the practical application of the most plain, simple, and unerring principles; and more pleasure results from the view, as well as more comfort from the use, of a neat well-constructed common house, than from the most superb but ill-contrived palace, where fanciful ornaments are frequently introduced with no better intention than to disguise blemishes in proportion and symmetry. Strength and convenience are the two most essential requirements in building; the due proportion and correspondence of parts constituting a beauty that always first attracts the eye, and where that beauty is wanting, carving and gilding only excite disgust”

— *The Carpenter's Pocket Dictionary*, 1797



Coming to an understanding of a subject is but the first step in obtaining the capacity to use that knowledge. The following is the author's attempt to produce a work of architecture using the vernacular process as an approach to preliminary design. It is understood that this is not the only way this information can be used, nor, is it implied that it is the best. It is merely one designer's creation while attempting to think in the vernacular mode.

The Site

The site is in rural Southwest Virginia and is the location of an old grist mill and the miller's house and farm. It is a 22 acre parcel with rolling hills and steep banks next to parts of the stream that runs through the property. The stream, Sinking Creek, is held back in the middle of the property by the mill dam which has been damaged severely by floods.

The building location chosen on this site is on the bank next to the dam so as to incorporate the dam into the design of the building.

This site was an important social and economic center for the surrounding area for many years. While the mill was still in use, news, both local and international, was verbally transferred by the miller and the area farmers waiting for their grain to be processed.

Centers such as this are nearly nonexistent in today's social environment. The only alternatives that exist are the 'Super' department stores and Malls where even the music is scientifically formulated for maximum affect on the customers mental capacity for shopping.

One of the decisions made early in the project was to choose a project that would foster social gathering. It was determined that the project most likely to activate the area and site in the desired way would be a restaurant. It is a gathering place where people come together for many of the same

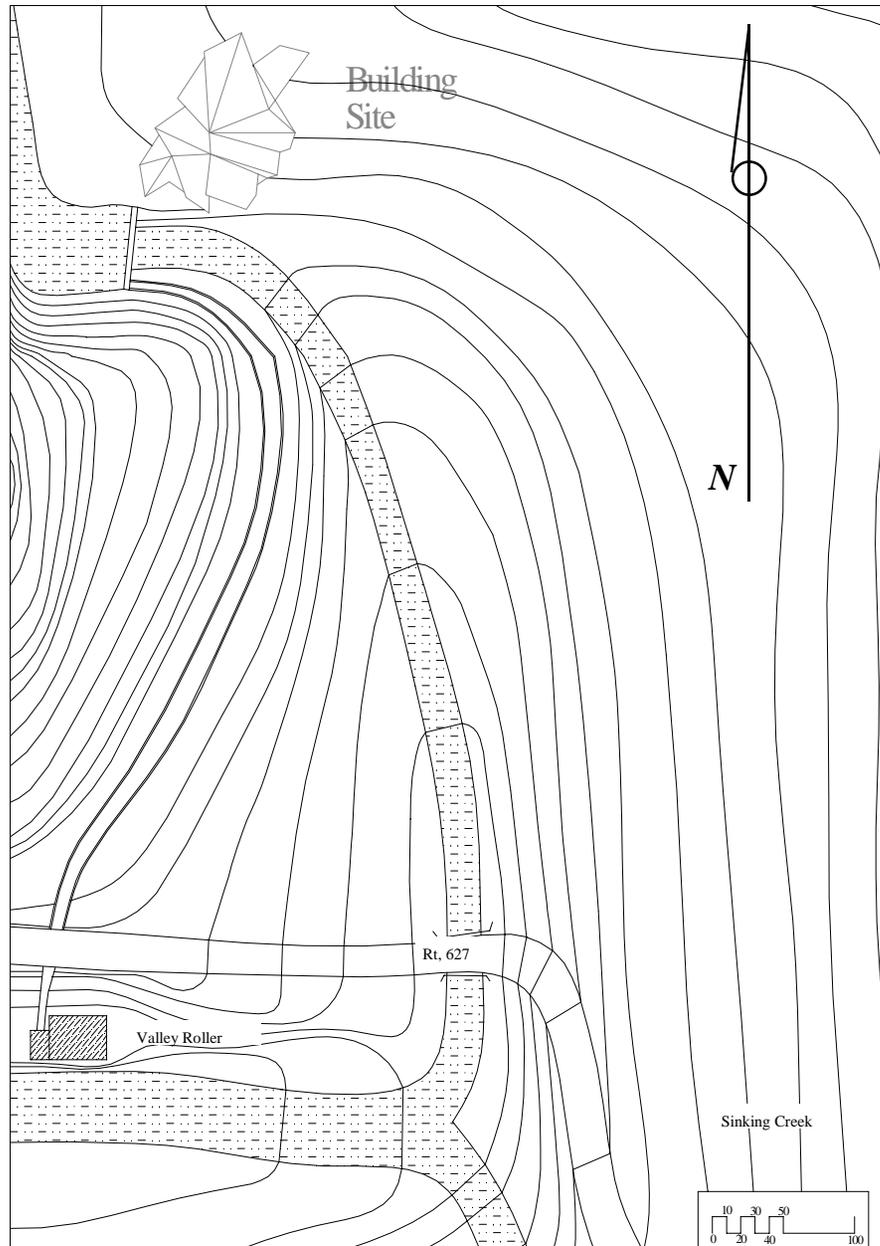


reasons that people came to this area decades ago. It was also determined that, because of its remote location, it would have to be a 'destination restaurant'.

The old mill had a strong influence on the design of this project in that the structure, inductively reasoned, housed the machinery that was a direct result of deductive methodology used in their creation. It was interesting to walk through this building and see where the inductive methods of the pre-industrialized eras came into contact, sometimes violently, with predominantly deductive methodology. The structure, much like a barn, was erected for the sole purpose of housing the machinery. It is a hybrid of timber-frame and stick frame construction and is grossly overbuilt. This is evidenced by one of the columns on the second level having settled nearly three

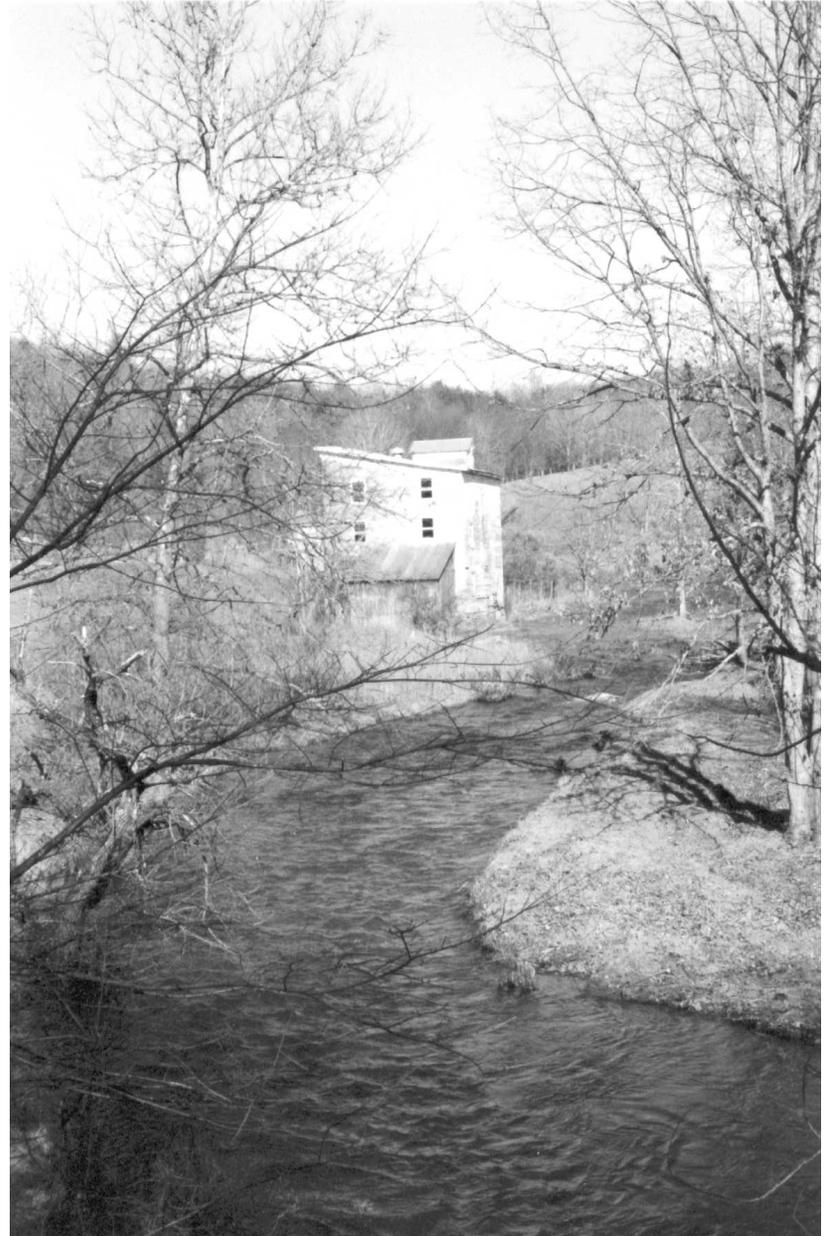
inches without the beam it is supposed to be supporting being affected. The builder obviously chose to keep the dimensions of the members as uniform as possible even if it meant overbuilding. Decades ago, when this mill was built, wood was cheap, but the milling was not. Therefore, all the timber went through the sawmill as few times as possible. Even with these restrictions, the builders managed to construct a building as functional as the machinery it housed and also were able to make it distinctively theirs. It is impressively simple, artistically plain, and completely utilitarian. The hands that built it still maintain a presence there.

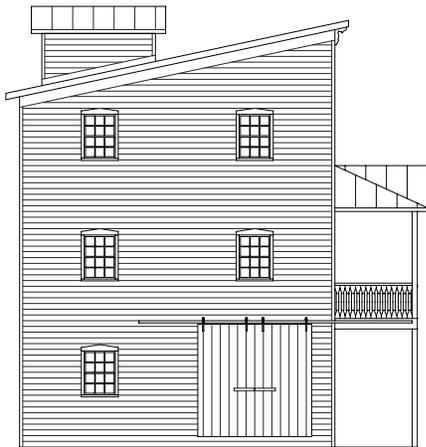
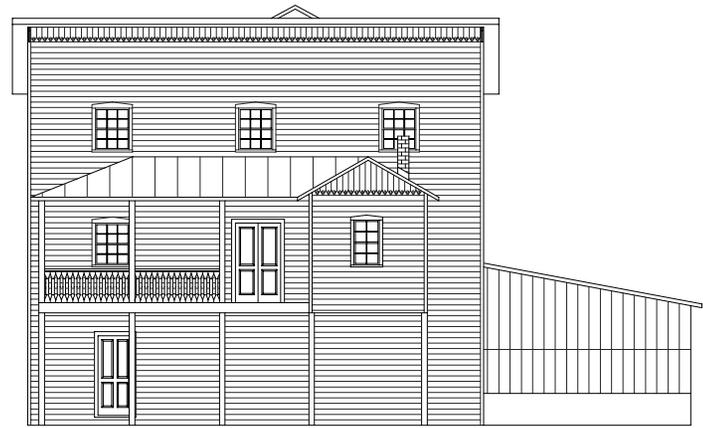
Site Plan



Related Structures

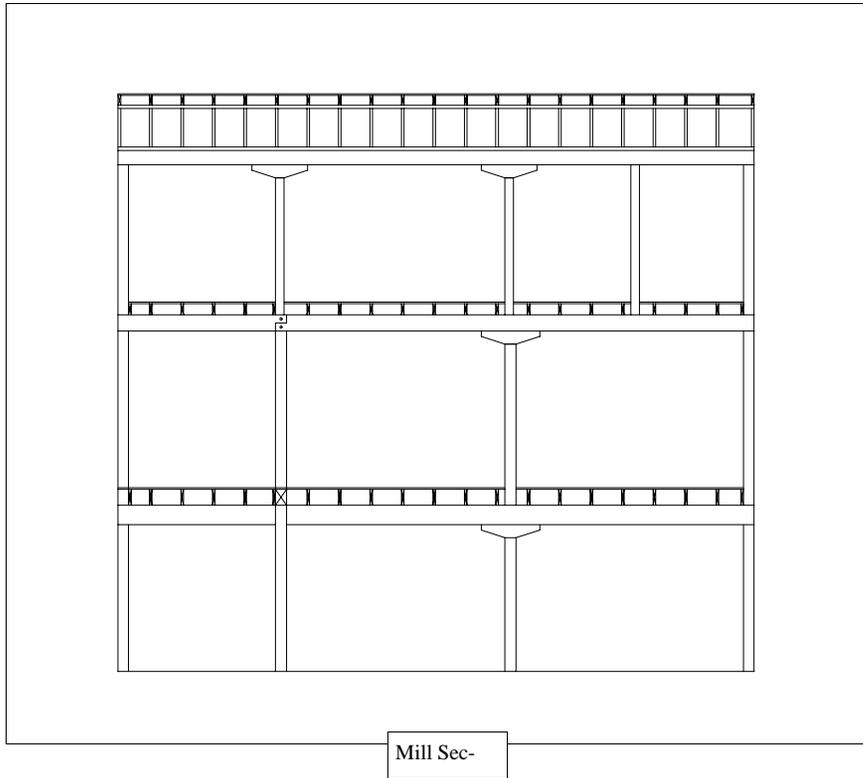
As with any work of architecture, there were influences on the design from the built environment. The main influence, and the main reason that the questions posed in this thesis were asked, was the old mill. As was mentioned earlier, it is not like many traditional mills. The machinery was built in a factory environment rather than on-site as were most millworks. Like many of the tools of the era, it shows the last vestiges of the rural artisan who, at this time, was trying to keep pace with the industrial revolution by becoming more mechanized. The machine works that created the equipment for this mill was capitalizing on this need and designed and manufactured equipment that could easily be transported over rough roads in horse drawn wagons. But, as with many tools produced in this era, they quickly became obsolete in favor of more efficient tools. The mentality that had survived for centuries, with inductive reasoning at its core, was no match for the logic brought forth by the industrial revolution and the mentality of deduction.



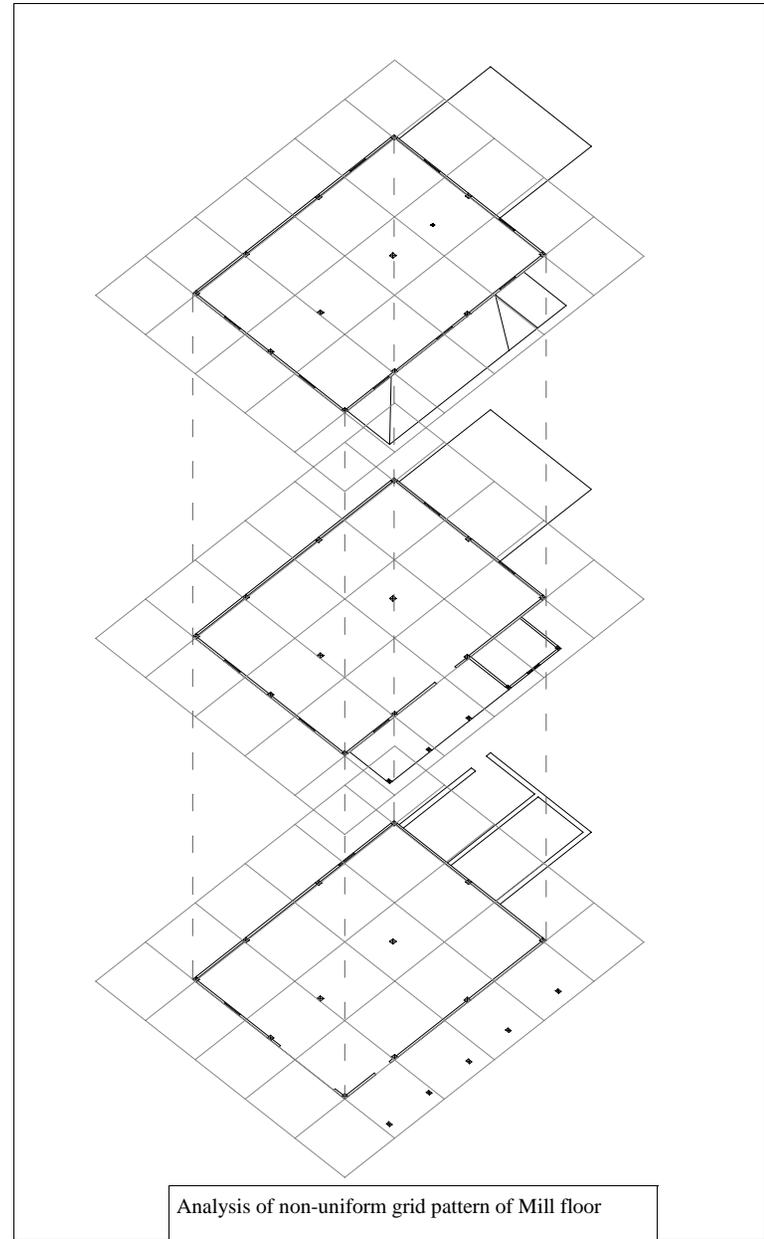


Vernacular architecture and industrial processes shared an antagonistic relationship during this era as the old mill bears witness. In these situations, the building was created using whatever was available with economy and efficiency being of lesser importance than they are given in the industrial process. The building was erected and the machines were fitted to the structure. This connection was an important one since it was how the scientific methodology was first experienced by many people. It was an acceptance of the way of thinking that created the industrial revolution.





A closer look at the structure of the Mill shows the evolutionary process of vernacular architecture. After completing measured drawings of this building, it was difficult to understand the reasoning behind how it was constructed. After researching its history, it was found that the first two levels were moved from another location and the third level was built where it sits today. That explained the cross-section to some degree, but the bay layout was still a mystery and, unfortunately, still is. It is assumed that the length of timbers on hand at the time of building dictated the size of these bays, but this is only an assumption.



Design Methodology

To attempt to use the vernacular method of design in the same way as vernacular builders was deemed an unrealistic task. To do so would mean an abandoning of a way of thinking that has been influenced by our culture. Designers can never make this transition fully. Architecture is a cultural artifact and the designers who create these artifacts are, themselves, results of that culture.

It was decided, instead, to use the vernacular methods, but apply them in ways different than those used in the past. Where, in vernacular architecture, the individual inferences were related almost solely to pragmatics, in the following preliminary design, those inferences were based on the experience of the space both inside and outside the building.

One major difference that was found between academic or professional architecture and vernacular architecture was that the vernacular is a much less iterative process. In other words, there seldom is a stepped process in the design stage where revisions are made and mistakes caught. Revisions to a design are made as the structure is physically created and the mistakes that are encountered are dealt with as they arise. The following design attempted to minimize the number of revisions in order to maintain the initial design idea. The result is a preliminary design with only three revisions.