

Becoming an

Architect

Lee W. Waldrep, Ph.D.

Foreword by Marvin J. Malecha, FAIA, 2009 AIA National President

Environmental Design Excellence

NATHAN KIPNIS, AIA Principal Nathan Kipnis Architects, Inc. Evanston, IL

Why and how did you become an architect?

Near where I grew up, along the North Shore of Chicago, there are amazing homes designed by everyone from David Adler to Frank Lloyd Wright. The residences in the area were built starting in the late 1800s, with construction peaking between 1910 and the late 1920s. Many of the homes located right along the lake on Sheridan Road are textbook examples of great European homes mixed in with the very first Prairie homes designed by Wright. In addition, there are also various contemporary designs, though not as numerous.

My parents would drive into Chicago and we would occasionally travel along Sheridan Road to get there. I would be glued to the window watching these great homes.

Later, the 1973 Arab-Israeli war and ensuing Middle East oil embargo opened my eyes about America's dependence on foreign oil. I felt that designing energy-efficient buildings would help decrease our reliance on that volatile energy source.

Why and how did you decide on which school to attend for your architecture degree? What degree(s) do you possess?

I applied to several schools, but chose the University of Colorado. I wanted to attend a school that offered an architecture program but also was not a very large university. University of Colorado had a pre-architecture program and was not an overly large school.

At the time, I misunderstood the implications of a pre-architecture program, which means that the degree I would receive, a bachelor of environmental design, was not a professional degree and would require that I obtain a master of architecture to complete my studies. (My well-meaning, career counselor in high school assured me that this was the same as either a bachelor of architecture or a bachelor of arts in architectural studies.)

I also chose Colorado because of its highly renowned solar architecture program. Located in Boulder, the university was a natural center of interest in solar design. The climate and location are nearly perfect for studying solar design, being up at 5,000 feet above sea level and having more than 300 sunny days a year. Boulder is known for its liberal thinking, which went along with alternative energy research.

For my graduate studies, I researched more on where to attend. Arizona State University (ASU) in Tempe, Arizona, was recognized internationally for its solar and energy-conscious architectural design. Along with University of California at Berkley and Massachusetts Institute of Technology, I felt that ASU was one of the best schools for this field of study in the country. I was provided a partial scholarship, which made the decision very simple. I enrolled at ASU and graduated in the master of architecture program with an emphasis in energy-conscious design.

What has been your greatest challenge as an architect/principal?

> Originally, my greatest challenge was convincing clients to let me push the envelope with what



Moldan Corporation, Evanston, Illinois. Architect: Nathan Kipnis Architects, Inc. PHOTOGRAPHER: NATHAN KIPNIS, AIA.

I want to do with "green" design. I would try to nudge them into going to a higher level. With the recent explosion of interest in green design, I now actually have the opposite problem. I have people coming to me with so many green ideas for their projects that I have to spend time prioritizing their goals and selecting the ones that are most appropriate for the project location and budget.

Another major challenge is to be constantly bringing in high-quality projects in a timely manner. I have been very fortunate to have had a nearly constant increase demand for our services, while rarely running slow periods or periods of too much work. I have also been able to obtain commissions that allow me to do quality design that generates positive publicity, which in turn provides me with the ability to bring in work of that caliber or higher. This is the kind of cycle that feeds upon itself in a positive manner.

What are your primary responsibilities and duties as an architect?

My specific responsibilities are threefold. The client comes first and foremost. It is very important that I carefully listen to their requests and make sure we achieve them, even reading "between the lines" occasionally. I let them know that is it is their project, but my name is also associated with it, which means that there are certain design and technical standards that I want to make sure are achieved.

The next responsibility revolves around my office. I have to make sure we are properly compensated for the work we do, make sure the contracts are correctly set up and be smart about how we market ourselves. Marketing is an ongoing commitment that requires constant attention to make sure we have new ongoing media material "in the pipeline."

And finally, I have significant responsibilities to the people in the office. They must feel that they are part of the team and that their input is important to me. I have them attend various "green" seminars or events to further their education. I also try to get them to sample a very wide range of experiences in the office, from CAD work, client meetings, and field administration to public presentations. It is mutually beneficial.

Your firm is strongly committed to integrating excellence in design with environmental awareness. Can you provide more detail to this statement and describe how it is accomplished?

> What my firm attempts to do with as many projects as possible is to incorporate "green" principles at as many stages as possible. The earlier in the process the better. We try to do this in an integrated

- ▶ Green Vacation Home, Sturgeon Bay, Wisconsin. Nathan Kipnis Architects, Inc. PHOTOGRAPHER: WAYNE CABLE PHOTOGRAPHY.
- ▼ Ford Calumet Competition, Chicago. Architect: Nathan Kipnis Architects, Inc. PHOTOGRAPHER: NATHAN KIPNIS, AIA.





way, as opposed to "tacking on" green technologies and materials.

At the beginning of the project, I try to see what design decisions make the most sense in terms of "green" design and in response to the projects specific goals. If there is a solution that I feel works to satisfy both, I pursue it in detail. There is usually a single overall theme that unifies a design. Finding it is really the challenge. If I can get that one big idea to solve the project's key problem and make it work

"green," it usually can be done in an economical way and helps the client support it. To me, designing a green project is an opportunity to make the pure design even better and have more meaning. It should not be a burden to design green.

Can you describe more about your work with the "Green Bungalow Initiative?"

▶ Begun at the request of Mayor Daley, the "Green Bungalow Initiative" (GBI) was a program begin in

2001 to provide green design guidelines for those purchasing bungalows in the City of Chicago. Mayor Daley grew up in a bungalow and has a natural affinity for them. The City had already established Bungalow Design Guidelines for people renovating bungalows. The "Green Bungalow Initiative" was established to provide a "green" vision for bungalow renovations and additions.

There were four primary consultants for the GBI. One was for architectural design, another for technical issues (ranging from mechanical systems to the physics of insulation's systems); one was for green materials and methods and the last for health-related aspects.

I was chosen to work on the green materials and methods, principally because I had recently completed the "Green Homes for Chicago" program, which was an international design competition in which my firm was one of five selected to have their designs built. The house that I designed was the least expensive to build and used many "green" methods and materials.

The four consultants provided written and graphical information that was intended to used by owners of bungalows or those about to purchase them as a guideline for "green" principals specific to bungalows. The information could also be used for any home style, but the content of the material was geared towards bungalows.

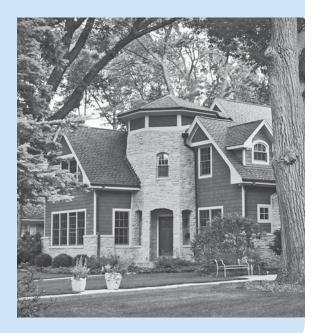
Where do you see the field of green architecture heading in the future?

I believe that in the short term green design will be integrated into local and national codes on such

Belmont Development, Lake Bluff, Illinois. Architect: Nathan Kipnis Architects, Inc. PHOTOGRAPHER: NATHAN KIPNIS, AIA.

a level that the term "green design" will disappear and become ubiquitous. Beyond that, however, there will be significant challenges as natural resources become scarce enough that it impacts people's lives on a daily basis. The consequences of cheap oil's disappearance is becoming more and more evident.

This is not a political problem that can be solved by drilling for more oil to the corners of the earth, but requires a fundamental change in how society functions. Politics being what they are, this message will no doubt be twisted every which way, but in the end, the path away from a fossil-fuel-dependent society is critical for its very survival. Renewable energy and appropriately designed built environments are the only way to accomplish this. Because existing buildings use so much energy and generate such enormous amounts of CO₂ emissions, architects are in a unique position to lead this change by designing



super-efficient homes and communities. The difficult aspect for this is to make people understand that in fact life influenced by cheap and abundant power will need to be scaled back. Hybrid Escalades are not the answer; they are the problem.

How did your education help you prepare for these challenges?

Description by their very training, architects are able to think outside the box and look for solutions where others see only problems. "Celebrate the Problem" we used to call it in school. A specific part of that training is the ability to look back at historical precedents to see how they could inform a current problem. I like to examine how homes functioned before cheap oil, and see what can be gleaned from those time-tested designs and integrate them aesthetically into the twenty-first century.

Who or what experience has been a major influence on your career?

As I mentioned, the single biggest influence in my career was the 1973 oil embargo and how I thought I could contribute to a solution to it. This event is what started my career in energy efficiency, which has grown into "green" design in all of its forms.

Professors Philip Tabb at the University of Colorado, and John Yellot and Jeffery Cook at Arizona State University influenced the way I practice environmental design by showing me the importance of integrating energy efficiency into architectural design and understanding where the historical roots of environmentally sensitive architectural design were derived from Amery Lovins, who taught a summer school class at Colorado, made a huge impression on me relative to how architecture, energy and national security can be interrelated.

I was also fortunate to have worked in two very good, though very different firms. At Porter Pang Deardorff and Weymiller in Mesa, Arizona, the design principal, Marley Porter, had a great outlook on how fun design should be. It was an infectious quality that spread through the office. The other partners were also very generous in sharing their skills. It was a great work environment.

At PHL of Chicago, it was much more production based and very serious. Once you were at the project manager level, you ran a project like it was your own firm. They really taught me how to run an office.