

“In A Sustainable NUT Shell”

Samuel H. Gross, Jr. AIA, NCARB

“This building had no precedents; it’s motivation was clear and full of belief. The force of it’s “wanting to be” inspired a design equal to its desires in form. Today, building needs an atmosphere of belief for the architect to work in.”

Louis I. Kahn

Everyone seeks that “eureka moment” or that atmosphere of belief for their creative explosion into a sustainable design idea. Such an experience requires a persistent patience and preparation for that moment to evolve. If our passion endures such a design journey or calling, surely the final solution must adapt to future change? A significant transition is resulting from the global climate change and all communities are beginning to adjust with some adaptation. This new sustainable nut shell is requiring all global “ecological footprints” to balance mankind with nature. Therefore, what is our design “eureka moment” responsibilities while maintaining our obligation to protect the health, safety and welfare of our civilization?

This is an extremely heavy burden for our design profession while constantly seeking the public enlightenment of “spent light” reinforcing our ideals of “firmness, commodity and delight”. What rational architect expects that using primarily sustainable materials in the final solution satisfies this ecological challenge? The solution of the design task is not only in the details. The task needs to be more completely balanced and adjusted to a broader concept with global climate change and cultural adaptability. Can we find our own “Rosetta Stone” to compliment our global connectivity?

“We are not going to be able to operate our Spaceship Earth successfully nor for much longer unless we see it as a whole spaceship and our fate as common. It has to be everybody or nobody.”

R. Buckminster Fuller

This concern encompasses our three step design process of “why, what and how”. Consider an answer to “why” that accepts adaptation and change as constants. Then “what” certainly needs redirection. For instance, conclude that the global waters are rising and coastal cities will be adapting new ecological footprints. How will their adaptation affect other inland areas? Certain transitions for both will occur using technological advances and design ingenuity. This broader concept requires a more adaptable design to avoid wasting valuable resources, loss of economic capital and loosing lives. More pressure will be put on land that is safe from flooding, which will raise property prices and change development patterns everywhere. This suggests a need to reduce the future impacts of recognized climate change and to adapt to those global impacts that cannot be avoided. Certainly a design strategy of improve, reduce and

generate net zero site energy for our projects should be advocated.

Perhaps, our new design orientation of adaptation can be related to the transition that has formed during the solar decathlon design competition which gets displayed on our Washington Mall by our universities. The original competition envisioned displaying solar energy collection for sustainable shelters for public and student education. But from this basic design criteria, solutions evolved that were adaptable, mobile and sustainable for any location. Every solution was developed, shipped and engineered from a remote location. Simple site erection and disassembly was easily accomplished by each university. To many disbelieving skeptics, solar energy collection during inclement weather was found sufficient to maintain living conditions during one two week competition. Moreover, the public found many design solutions which provided livable conditions through the adaptation of sustainable design and technological material development.

As design professionals, we have to begin to monitor and educate the moral attitude of our global participants soliciting our services. To avoid this “ecological footprint” liability, we need to say, “No.” in a sensitive way. I admit, this will not be an easy position as others may surely reap the immediate redesign profits of ecological chaos or adaptability. However, as insurance groups refuse coverage or raise their rates beyond the acceptance of the affluent; bankers, private clients and enlightened developers will realign their risks and change their attitudes towards recycling, conservation and using renewable natural resources. But first we have to say “NO” to servicing the unacceptable footprints that require continued unsustainable global lifestyles. From this context in what we see, how we respond, and why we choose to offer our services will clarify our calling. In a nut shell, this refusal or negotiation may sustain us all. To avoid eco-panic, we can surely endure a little eco-chaos to find our “eco-eureka design moment” that provides a meaningful change.

“Architects have the ability to change entire industries with the stroke of a pen.”
Edward Mazria
