

Green Buildings: Building Blocks for an Integrated Community

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An increasing understanding of sustainability is moving the building industry towards more environmentally sensitive designs. However, human dimensions of design are frequently neglected. Sustainability, in practice, necessitates enhanced community design, including integration with local business, agriculture, and culture; facets of design that only today's most forward-thinking green designs address.

Until modern times, buildings could be compared to living organisms in that they evolved in response to climate and topography, changing form and composition as necessary to protect building occupants from the elements, while regulating temperature and humidity to the greatest extent possible. This model was relative to both the human occupants and the surrounding environment. Buildings served to connect and foster the relationship between humans and the systems in which we live.

We have diverged from those times significantly. Contemporary construction practices do not successfully incorporate the principles of nature, as demonstrated by the massive amount of energy, water and materials required to build and operate our buildings, not to mention all of the resultant waste. Buildings remain stagnant structures to be built, used, and disposed of. Occupants rarely have access to even basic building regulatory features such as operable windows or landscaping. In short, buildings no longer facilitate the human-environment relationship, but have contributed to the deterioration of it in our culture.

We are hopeful, however. The rapid growth of the green building movement worldwide, the "green-streaming" of environmental awareness, from organic food and cotton, to recycled products and eco-getaways is bringing a new consciousness to the masses. Vanity Fair recently released its first "Green Issue," beginning an "increased commitment to reporting on the threat to our precious environment." Craigslist.org and Freecycle.org are documenting massive use of their used-stuff outlets. The environmental movement is evident around us, and is arguably here to stay. Yet something is missing. Only if we continually strive to make this "green" movement as complete and holistic as we dream about, will it remain.

Celebrities regularly receive press for driving hybrid vehicles, but little mention is made of their roles in their communities. Buildings may be certified as green, but there is no mention of construction worker wages, or the human equity invested in building materials. Companies regularly publicize their environmental initiatives, although few tout their progress in addressing their workers or community. The WTO and World Bank regularly draw significant social justice protests, and major immigration legislation is currently being debated by congress and the public today.

People matter. Communities matter. The necessity to integrate our designs with natural systems is paramount, but we must also recognize humans as active participants in those

systems and our building designs must foster the relationships between humans and the environment. In the words of Van Jones (Bioneers, 2003):

“A movement that is courageous and visionary on the environment, but cowardly and ignorant about the social issues will fail. And on the other side, a movement that is visionary and passionate on the social side, but is ignorant and indifferent on the ecological side, will also fail...Both movements are destined to fail, but there is a light at the crossroads. At the crossroads is where the hope is.”

Jones contends that sustainability can only exist with a unity between social and environmental issues. With the rise of the “triple bottom line” and current thinking in the field, many sustainability professionals would agree. As building designers, though, where do we begin? What is our role in creating community? Or in fostering human relationships with each other and with the environment?

While the challenges in addressing social equity are complex, the ideas presented here are intended to address human aspects in terms of the design of buildings that foster community. How does one design a building that not only recognizes human-design, but embraces it? Sustainable design is humbling in that none of us know enough to do it ourselves. We must draw on the experience of a multitude of stakeholders to create a holistic design. The rise of design workshops in the 1970's and the integrated design charrette process today have helped to facilitate community participation in design and continue to serve as excellent tools for engaging the community to create designs that are needed, localized, and supported.

The intangibles of design are now as important as ever. Happiness, community, creativity, and love are core human values that need to be expressed when designing human habitats. These qualities result in designs that celebrate connectedness of the designers with participants and with place. For example, to allow children to build strawbale park benches or paint a mural on a visible wall in the community serves to connect and honor creativity and the future through children. Water features are well-known to serve as a place of respite and a source of relaxation. Edible landscapes foster deep ecological thinking, honor our agrarian roots and connect us with local food systems. The sum of these decisions is a place that respects life, growth and development within our ecological fabric, while retaining aesthetic appeal through the union of industry and ecology.

This type of design is possible. Many existing and potential design strategies can help to integrate buildings into communities and local environs, resulting in designs that exceed measures of sustainability and are restorative in nature. What makes these considerations so important at the onset of a project is that new projects represent opportunity. Whether new or redeveloped, the onset of a project represents the investment of capital that can be spent thoughtfully or without regard for effective design. It is much easier to design with human elements to begin with than to try to correct design decisions made without these considerations. Herein lies an opportunity for restoration.

We recognize the need to achieve a human dimension in planning and development in order to promote health and prosperity within a community. We must now put thoughtful design consideration into integrating humans into the ecological fabric of place. The six design principles described below can serve as a filter through which designers can realize truly restorative human-based designs. The celebration of food and recognition of spiritual consciousness are critical to this task. They can be embraced throughout design through community participation and input in the design process and resulting community infrastructure. The result is an equitable economy that promotes the well-being of the community that supports it.

WE ARE NATURE

Design must recognize the inherent relationship of humans and the natural world. In a reversal of trends, design can no longer serve to separate people from the very being of life. We have a desire to create better places to live and work that nourish our wellbeing and the environment in which we operate. These places, reflecting our values, will be healthy, functional, and efficient, as well as serve to restore damaged and degraded ecological and social systems. Janine Benyus, in her groundbreaking book, *Biomimicry: Innovation Inspired by Nature* (1997), observes principles found in nature that, when applied to design, can help us understand our role in the natural world.

Nature runs on sunlight.

Nature uses only the energy it needs.

Nature fits form to function.

Nature recycles everything.

Nature rewards cooperation.

Nature banks on diversity.

Nature demands local expertise.

Nature curbs excesses from within.

Nature taps the power of limits (p.7).

WE CELEBRATE FOOD

Humans have an agrarian history, one that is embedded in us and between us. From sharing meals around the kitchen table to sourcing food from the local community farm or garden, food systems serve to connect people with each other and foster a deep awareness of place. In conventional design, the roles of food systems have been expelled from population centers to the periphery and beyond. The growing distance between production and consumption in today's designs is worrisome in that an increased amount of energy is required to put food on the table, and more importantly, people have been removed from an understanding of their life support systems. Design must serve to reconnect people with soil, kitchens with gardens, and menus with seasons. Localized food systems can also increase biodiversity and land productivity in what are currently ecologically stark urban areas.

WE ARE SPIRITUAL

Community-based design philosophy embraces a spiritual component in design. Designers can begin by asking of their designs questions such as “does this feel right? Am I aligned with the implications of this design? And, is it fun?” Each of these questions signify an alignment with personal values, as well as with communities and natural systems. Bio-inspired design can help ignite a connection of spirit when one is humbled to pay special attention and listen to what nature is teaching us. While it remains somewhat of a taboo to address spirit in formal settings today, design must accept the responsibility to acknowledge and celebrate it head-on. Love is the most real thing we know, yet our vocabulary to describe it remains limited. Design must embrace core human values to break from the current mantra of life-less design and development. Only then can buildings align with humans to promote a positive culture.

WE ARE CREATIVE

Art plays a vital role in buildings for connecting communities. All too often, difficult decisions are forced upon designers by restrictive project budgets, but this is not always the case. Many projects require that 1% of the budget be spent on public art. The incorporation of art allows local artists, school children, and adults alike, to express themselves and share stories, hopes, and dreams through various media. The design process itself must recognize the creative being of participants. Art helps communities differentiate themselves and defines a “communal personality”. It acknowledges that one-size does not fit all. It is a constant reminder of community participation and helps individuals identify with place.

WE HAVE A VOICE

Participatory design is a great way for community members to be heard. By becoming involved in the design process, the energy of the community and building users can be channeled into the building design. Today, many decisions are made remotely and people are apt to feel disenfranchised. In an age of mass media conglomerations, mass marketing, mass production, and mass consumption, individual voices, and even those of entire communities, can easily fall by the wayside. Building design needs to reflect local needs and culture and must quite itself to do so. The designer’s job is to translate the community’s visions and dreams into concrete plans that give expression to the collective will. Such efforts foster a sense of community and garner support for projects.

WE WANT HUMAN SYSTEMS TO REFLECT OUR VALUES **JOBS + VALUE + RESTORATION + HEALTH**

Designers do not always recognize their role in designing economy. The notion of quality of life is becoming increasingly referenced in visioning exercises and metrics for success. Living economies serve to provide that quality, through a focus on jobs, value, restoration and health. Multi-use development is essential to healthy communities and can serve to stimulate local economies. With increased access to public amenities including shopping,

entertainment and transit, we can decrease our dependence on cars and the associated negative environmental and social impacts of their use, while promoting healthy lifestyles. Smaller and more diverse spaces for local businesses to occupy as well as space adaptability and appropriate pedestrian-oriented strategies can contribute to realizing a living economy. Another example, industrial clustering, achieved in part through advanced urban planning, relies on waste from one process to be readily used as the feedstock of another process, thereby eliminating the concepts of waste and pollution. Eco-industries can provide stable and well-paying jobs and are better for the environment. In addition, living economies represent a more just distribution of wealth and help communities benefit from their economic activity.