

MODERN ARCHITECTURE AND SUSTAINABILITY SETTING PRIORITIES FOR SUSTAINABLE DEVELOPMENT AND MANAGEMENT

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GOOD MORNING, Members of the Panels, Colleagues, Fellow Professionals Ladies and Gentlemen.

It is an honor and a great privilege to have been invited to address this assembly of experts with a paper on "Architecture + Sustainability." It was with feelings of mixed inspiration and discouragement that I embarked on this challenge. My country, the Philippines, as I speak before you today, continues to struggle with its political, social, and administrative problems and reforms against the debilitating perspective of global macro-economic issues. Its people are trying their mightiest to deal with the everyday economics of sustenance, at the same time striving to rise above the series of calamitous environmental events that have recently plagued the country. I wish the scenario could be better, the prospects a little kinder. But unlike my initial feeling of discouragement, my inspiration is far more deeply rooted. And this is where, I think, my role as an Architect of Growth has given me unyielding motivation. As architects, I believe that we have been endowed with a legacy -- to view all kinds of possibilities, may they be positive or

seemingly negative --as fertile grounds upon which social challenges, urban rebirth and sustainability can be explored.

Introduction

The architects often bring into their world a magnanimous expression that their creation are part of a social value but rarely has an architect step back to realize that the built environment does not change everything. Design is never dictated, but didactic only as part of a large environment. In fact, the best architecture is not designed by a single force, but represents a community solution to a variety of problems. which are better understood by society and not just the architect or planner. Thus, the practice of HUMILITY in DESIGN leaves a space for designer to evolve on its own leaving the expression of the more important aspect of life which is NATURE to take effect. Thus, allowing a modern man to distinguish between natural and the artifact because technology does not become the issue when applied.

The greatest obstacle to a sustainable and releasing design is the question of time. Human creation that endures is not conceived overnight. Architects have to balance the individual insights with the test of time so that the time of building, using and aging is not the responsibility of man or his design.

Town planners hope to legislate the behavior of those who live in their design and live-out the model world of their creation. But the built environment only does so much to people. Infrastructure does not tell man what to do but rather allows a flexible use for other builders of society. It is difficult for visionary thinkers like PLANNERS to fulfill its incompleteness. It is always best to accept that it shall always remain as part of solution not THE SOLUTION. Sustainable dreams become sustainable development when increase of population and resource consumption levels off. Then, finally, REDEFINING VALUES and commitment is required from consumers to want less and buy less, a pledge of the industry to buy less and builders to build less. However, can we do this?

Social realities, architectural challenges that shape sustainable development.

Every nation represented here in this assembly has formulated government initiatives to keep pace, in varying degrees, with new and fast-emerging technology. We are tasked to perform and squash competition in the race to becoming “city nations” as globalization and access to internet-speed monetary transactions spurred cities to establish and expand relations with international capital. Abolishing regional borders and barriers, the new global economic order has proven to be a catalyst for urban regeneration. Cities aggressively compete to become ideal hosts to an emerging populace -- the global mobile information society-- “time colonists,” as they are called, these professionals with responsibilities that span the globe, whose business interactions and activities are defined by “real time,” rather than space. As the emerging “knowledge economy” poses intriguing questions, challenges and opportunities on how nations and its cities may want to deal with information technology, knowledge management and information science in the light of architecture, urban planning, politics, and public policy planning. With this evolutionary trends, age-old ecology and environmental issues, over population, drugs, violence, poverty and prejudice, as well as, increasing gaps in social equality are in the eco-systems, ever-present universal concerns.

These are our realities.

And these realities are the forces by which our nations’ cities and urban developments are being shaped. As we grapple with modern-age issues of social responsibility, transformation in cultural identity brought about by strong western influences, the urgency for global connectivity, the impact of information technology, and the clamor for quality life-enhancing social infrastructure that address new levels of expectations, our people are faced with an abstract, but sweeping sense of historical dislocation and personal disorientation.

These are the scenarios that confront the very sustainability of modern, global development. “Sustainability” has been largely defined as “meeting the needs of the present without compromising the needs of the future

generation to meet their own needs.” (PCE 1998:2). This is an all-encompassing definition. And we, architects, are at the crossroads. We are the intermediaries, the “brokers of change” as we take a more pro-active stance in the delivery of sustainable development, as well as, in the attainment of balance within which it will flourish.

Hannover Principle by WILLIAM MCDONOUGH to fully support Design Sustainability.

1. **Insist on rights of humanity and nature to co-exist** in a healthy, supportive, diverse and sustainable condition.
2. **Recognize interdependence.** The elements of human design interact with and depend upon the natural world, with broad and diverse implications at every scale. Expand design considerations to recognize even distant effects.
3. **Respect relationships between spirit and matter.** Consider all aspects of human settlement including community, dwelling, industry and trade in terms of existing and evolving connections between spiritual and material consciousness.
4. **Accept responsibility for the consequences of design** decisions upon human well-being, the viability of natural systems and their right to coexist.
5. **Create safe objects of long-term value.** Do not burden future generations with requirements for maintenance or vigilant administration of potential danger due to the careless creation of products, processes or standards.
6. **Eliminate the concept of waste.** Evaluate and optimize the full life-cycle of products and processes, to approach the state of natural systems, in which there is no waste.
7. **Rely on natural energy flows.** Human designs should, like the living world, derive their creative forces from perpetual solar income. Incorporate this energy efficiently and safely for responsible use.

8. **Understand the limitations of design.** No human creation lasts forever and design does not solve all problems. Those who create and plan should practice humility in the face of nature. Treat nature as a model and mentor, not as an inconvenience to be evaded or controlled.
9. **Seek constant improvement by the sharing of knowledge.** Encourage direct and open communication between colleagues, patrons, manufacturers and users to link long term sustainable considerations with ethical responsibility, and re-establish the integral relationship between natural processes and human activity.

The Hannover Principles should be seen as a living document committed to the transformation and growth in the understanding of our interdependence with nature, so that they may adapt as our knowledge of the world evolves.

Design for sustainability requires an awareness of a full short and long term consequences in the transformation of the environment. Sustainable design is the concept and realization of ECOLOGY, ECONOMICS and the ETHICAL EXPRESSION as part of the evolving matrix of nature.

Architecture has a way of earmarking a nation's past, and in the other extreme, propelling its future. Providing a visual, tangible imprint of its pride --or its folly --generations before us had stood in awe at great landmark structures congruent to the form and shape of the vanities in the era on which they were built. History in these post-industrial times has taught us that architectural grandeur had often lacked the humility to go beyond the egos and the agenda hiding behinds structural artifice. Some cities, like my very own Manila, may have been born out of the purest of intentions but sadly, without much insight into the future and its sustainability.

Manila: a study in contrast.

The jewel of the 1900's urban development, now lay tarnished after its centennial year

From the ancient Tagala-Malay independent kingdoms of six thousand years ago to becoming the "military and ecclesiastical outpost of Spain in the orient" for more than 300 years (from the 16th century to the late 1800's), Manila had been described as:

"a unique and harmonious blend of cultures embodying grace, elegance, and a periods of great wealth and opulence... with strong Hispanic flavors" -- (Arch. Ramon Zaragoza; Old Manila)

Then from the early 1900's, Manila was regarded as the "most, orderly, peaceful, and most beautiful city in the Far East." It was the city's response to the call for "modernist approach to planning." It was the beginning of the "American dream," marked by the building of steel structures spawning large-scale, mass factories. We were espousing western capitalism as we moved to a modern, industrialized age. As we tolerated western intervention, we began our transformation from an agricultural nation to an industrialized collection of pocket cities. We built super highways to make way for "Fordism" as American motorcars were favored versus the more useful, more logical mass transportation that would have been ideal for an emerging metropolis.

"The master plan for the city included provision for large open spaces for public recreation, construction of government buildings, and supporting infrastructure....preservation of Spanish colonial architecture that co-existed with newer municipal buildings." -- (Design & Architecture / July 2000).

Historical records show sophisticated blueprints for the city's water systems as plans for underground sewage and floodways were created in the

1900's. If these plans were not blatantly abandoned, Manila would have stood a fair chance. After 100 years, past the threshold of millennial change, Manila has been transformed into a concrete jungle with peeling paint and a broken spirit --flooded, jammed, and severely congested. The city has become a study of ambiguity and contrast. A hodgepodge of sorts --a rich, cultural tradition that has seen its glory days, now vanquished to a silent, suffering tolerant mass of humanity. Without regard for sustainability, we have proven ourselves barren, and without the political will to effect the changes that would have propelled this once "elegant, wealthy" city to reach new heights in global urban development. What good is sustainability if we don't have anything to sustain?

In his recent visit in February, Robert Ivy, editor-in-chief of the Architectural Record, wrote his impression of Manila as...

"...the contemporary megalopolis of 10 million people spreads with cloying lushness... two eras merge on the horizon: a neocolonial Manila, a densely packed warren of low-scale government offices, universities, and housing; and spiking the periphery, clustered high-rises... 20 towers to the northwest, 30 further east. Off in the distance, above the smoggy air, the blue mountains rumble with thunder."

-- Robert A. Ivy, editor Architectural Record / April 2000

Transforming urban initiatives to advance sustainability.

Urban regeneration is not a lost case.

Sustainability in Makati --a case in point.

Makati, Manila's premier business enclave is another story. Home to the affluent, this business district has been subject to stricter measures of urban planning. This is the business district that Architect Robert Ivy referred to as the "clustered high rises further east."

"Makati, a new urban node five miles away at the foot of the largest cluster of high rises... Traffic is gridlocked as cars thread into intersections at will. Looking

down on this maelstrom from the million dollar condominiums, Makati seems as shiny as Gucci" -- (Design & Architecture / July 2000).

One of Makati's urban development projects is the Rockwell Center. Accessibility, being an essential feature of Rockwell's master plan is composed of wide roads and covered pedestrian walkways, views of the landscaped gardens and tree-lined roadways had lent a unique, identifiable and memorable over-all appeal. The plan allots half of the property for parks and playground, much more than 30%, the minimum government requirement. Ample parking is also a major consideration with the project allocating more than what is required by the National Building Code. Most parking areas and walkways are located below grade to leave the surface area exclusively for landscaping and open spaces.

"... boldly proclaims itself in the landscape made of major avenues and backstreets, with the Pasig River on one side, because of its dramatic visual contribution to the immediate vicinity --boosting the value and increasing the standard of living of that area of the city. An "environment friendly" development, Rockwell Center (has a) strong sense of place (that) hinges on the natural features of the environment where the building or the development is situated." " -- (Design & Architecture / July 2000).

With designs for communications accessibility as a main concern, Rockwell has invested in state of the art technology, making their four residential towers ready for high end internet and telecommunications connectivity. The livable spaces had been built to sit on a large exclusive garden block of 2.8 hectares land area. The row of residential building -- each a unique design of its own --provide an undulating succession of facade. These structures, as are the rest in Rockwell, are placed at least thirty meters apart to create a sense of space and exclusivity from one another. Another reason for Rockwell Towers' unique sense of identity is that they don't follow a "cookie cutter" style of design. Instead of a monotonous design with the same size and shape, the architects had come up with a variety of shapes,

sizes and volumes of edifices, as well as, different color schemes, creating an integrated family of buildings consistent in architectural style and character. The planners of Rockwell did indeed try, and had achieved their vision in transforming an industrial zone into a successful, premiere mix use land development and determined to be a well managed and sustainable community within a City.

Redefining Sustainability

We look forward to sustainable, creative, socially responsive partnership ventures that provide for our future generations. Sustainability must deliver ecology-driven, quality of life-enhancing urban communities...

- Office complexes that are people-friendly, with work spaces conducive to working.
- Where constructing financial centers inspire equality and public service rather greed and profit.
- Where mass transportation is efficient, affordable, and safe.
- Where educational institutions put greater value on learning, teaching family values and fulfilling community needs.
- Where health care is not a luxury, but a standard amenity, designing and building medical facilities must be given special emphasis.
- Community centers are significant areas where people can meet and converge for recreation, and friendly interaction.
- Where standard communication facility that assure fast and flawless connections and inter connectivity.

For urban development to be sustainable, we must as well address the demand for small, community-based health facilities or wellness centers. As personalized healthcare becomes the trend, sustainability issues pose a challenge to health care providers to influence patient satisfaction and well-being. Moreover, the increasing aging Asian population has to be sustained.

Culturally diverse yet requiring specialized health care needs, their priorities and needs have undergone significant changes. The extended family set up that used to take care of the elderly have become dual income families with new social priorities. Retirement homes, assisted living communities, and professionally managed geriatric care facilities, unheard of two decades ago, must now be given attention by both government and private sectors as the increasing Asian population, aged 65 and over, have the financial capability to select the best facilities available to care for them. This should signal a need for a paradigm shift in health care management, creation of new facilities and upgraded systems that are sustainable and adaptable to our Asian culture.

These are sources of encouragement and seeds of inspiration that motivate us to become conscious of our role as advocates of sustainable development. We see collaborative partnership opportunities initiating standard working guidelines that employ

- value economics
- government support
- conservation and asset management
- social justice
- cultural identity
- re-establishment of historical ties
- re-establishing personal and collective roots
- re-enhancement of the city through restoration of identity and community
- return to the human scale and recreation of community
- recreation of new spaces that express traditional visions with modern technologies and materials
- expressions of aesthetics of diversity

In an environment that advocates sustainability, maximizing the value of professional partnership means substantive knowledge on how cities, economies, and ecologists interact. Urban planners and policy makers who

have been part of successful initiatives would know that a shared experience among respected colleagues is priceless fulfillment in itself.

The crisis of modern age is not exclusive to developing countries. It appears all around us. As it resonates throughout our formal institutions, it haunts our daily consciousness and everyday lives. In this age of dot.com dreams and equally transient fears, our almost religious fatalism has convinced us that "anything is possible, but that nothing can be done." The social infrastructure deteriorates under the crushing weight of crime and poverty, the homeless and under-educated roam the streets as new skyscrapers reflect the polish of multinational finance and commerce. The real meaning of sustainability has become of primary importance as we give serious thought to conditions of our ecosystem, the plight of our cities, and the tendency of rapid urbanization in the continuation and expansion of western cultural dominance over other cultures in the global scenario. The sustainable agenda is empowered with a similar ethical positivism. Environmental discourse must not be reduced to the technical domain, physical criteria is seen as a source of responsibility for faults that are mostly structural consequences of particular intentions and ideals.

Conclusion

This paper concludes with a call for a redefinition of what is and should be 'sustainable.' I have sited scenarios of an urban development that had gone through modernist transformation and failed, its resurgence and the hope of its rebirth. I have lined up characteristics of a simplified ideal community set up, as well as, short listed initiatives for sustainability. We now should be able to come together, to process recommendations and articulate how we can promote sustainability, values economy, preserved environment, and social equity within our own unique cultural dimensions, all these without sacrificing our larger responsibility for global imperatives.

This paper further concludes that MODERN ARCHITECTURE is a creative expression that links the world as we bridge the gap through

GLOBAL EXPRESSION of the arts and sciences and practicing architecture in a GLOBAL ECONOMY have responsibilities to undertake as professionals of the world.