

MS DAPHNE CHAN:

Good evening. I am very happy to be here to share some of my reflections of architecture and its relevance with the environment, history, and our culture.

As an architect we are confronted with different issues both macro and micro. Among these are design, environment, urban planning, interior, heritage, economics, technology, et cetera, et cetera. To me, architecture is a utilitarian art which embraces both humanities and science.

In school, we were taught that design means problem solving. As architects we apply our design scales in different arenas in particular a built environment. Today, one of the most imminent problems that faces sustainability is how should we act as good stewards to keep our planet in a reasonably good state for the next generations, and apart from acting as responsible global citizens how do we tackle the various environmental, economical, and social aspects of things?

At the same time, we must respect the past, which has much impact on the present as well as the future. In the ultra capitalistic city of Hong Kong where land values are high and the real estate being speculative, most developers and investors often offer the life cycle which is the immediate economical gains rather than the larger longer term environmental benefits.

To secure a better future for our society, there is the call for a paradigm shift to look at the gains and losses from the perspective of the whole lifecycle of a building. There should be more resources devoted to research and development with more knowledge sharing and collaboration among all stakeholders. Then it will be up to the building professionals to apply the technical know-how creatively and sensitively.

After I graduated from the States, I returned to Hong

Kong and worked for a few years in the private sector before I joined the Housing Department. I consider myself fortunate to work for this public housing developer who has sustainability high on the business agenda. I would like to share with you some of our recent initiatives.

To be more environmentally sustainable since 2004, every new HA project is required to use computation dynamics techniques to carry out macro climatic studies. Apart from carefully studying the disposition of the building block to take advantage of the prevailing winds, design features like wing walls are applied to improve ventilation performance.

Extended overhangs with tinted glass are used in selective areas to reduce solar gain, energy consumption, enhance greenhouse emissions.

We also attach importance to research and development against the common notion that economy and environmentally friendly buildings cannot be reconciled. We commissioned our consultant in 2002 to pioneer the study of building materials from the lifecycle, environmental, and costing perspectives. In short, these are called LC and LCC perspectives. The main objective of the study was to improve the selection of materials through the development of an integrated decision supporting tool. After two years of intensive research, came the birth of this computed model with the input of the various data of the material alternative. The software then generates this graph, and the result would fall into one of these quadrants, which would give an indication of how it compares environmentally and economically against original materials. For example, in quadrant 4. That means it decreased both in cost and environmental impacts; therefore, a desirable alternative.

Based on the LC, LCC II, we have since made a few changes from the previous norm. Examples are the replacing of ceramic tiles in the lift lobby by paint. Soft wood has now been specified for the core of some of the door types also and the use of fibreglass instead of stainless steel poles.

Aside from the technical side of things, we see community participation as a facet of social sustainability, and some of our projects have engaged the local community groups to gauge the needs. The objective of this is to generate a higher sense of belonging and satisfaction among the participating stakeholders who give valuable use and input in our design process.

Another aspect of social sustainability is to reflect on how architecture constitutes our history and culture by giving us an identity. This is Murray House, and I think probably most of you have visited it in Stanley Plaza. However, do you know that originally it was a building located in the central district built by the British Garrison in 1944 immediately after the establishment of the colonial government of Hong Kong? This Victorian style neoclassical building has witnessed Hong Kong's history from a fishing port to a world class city and financial centre. Succumbed to development pressures, this three-storey building gave way to the new 20-storey building which is the Bank of China in 1982.

The building was carefully dismantled stone by stone, and the building components were stored for 15 years before a new home in Stanley was offered by the Housing Authority. Reconstructing this heritage building involved a reassembly of the 3,000 pieces of preserved stone using the local masonry techniques. It began in 1997 and was completed in 2000 and is a major achievement in conservation.

Despite the efforts taken by building practitioners and individual government departments, Hong Kong still needs a set of comprehensive conservation policies for both built as well as natural heritages. For instance, it is interesting to know that this reconstructed Murray House is not yet a listed heritage building. Would it be possible that we will lose it again after this arduous and painstaking rebuilding?

To inject a little optimism, it is good to see the recent

initiatives from private philanthropists in donating the heritage building to the government for the enjoyment of the public. These hopefully will serve as impetus for the formulation of policies. To push ourselves to act a little more in the absence of conservation policies for private buildings, some of these great architectural iconic masterpieces may one day disappear. Can you imagine how lacklustre our Victoria Harbour would become?

Our sustainability movement still requires an enhanced public awareness, a heightened social conscience, as well as corresponding government policies to offer incentives or impose penalties. For now, building practitioners should use our professional skills with sensitivity to create and preserve the environment that are more humane. Of course, our ultimate dream goal is for our buildings to be in harmony with nature -- *tin dei yen wo*. Thank you.