MR STEPHEN CHAN:

Thank you for giving me this opportunity to speak with you about architecture here. I would like to touch on a little bit about education and then I will go on to show you a few of my projects.

First of all, I think Hong Kong is a great place for learning vertical thinking. Why? Because we have so many things to do in so little time that vertical thinking is always the best way to arrive at a solution in a very fast way. Vertical thinking is concerned with proofing or developing concept patterns -- that is by Edward de Bono.

Whenever a question comes up, we look at our past experience, if you can back up. We solved the question with this direction in the past, so it must be the right direction, so we go on with it. This is a simple way of dealing with tackling problem solving. If you ask the children in America to draw you a house, maybe this is what he will show you because this is a house that he saw before, he experienced before, and this is direct solution.

How about in Hong Kong? We live in a different environment. We are very densely packed. This is Mei Foo Sun Chuen and it was so successful the other developers began to build higher, more densely, until the whole of Hong Kong was packed with these types of high-rise towers. It becomes no-go of the housing authority.

It is the identity of Hong Kong now. If you ask the children from Hong Kong to draw you a house, this dream house, they may draw you this -- two towers on a podium. There may be a lot of falling people. If architecture is that easy, we can easily compose a building plan with this in a few minutes.

I believe that architecture is more than that. I believe that architecture has to do with design thinking. Instead of vertically building upon our past experience, I think that we should think laterally; as described by Edward de Bono, lateral thinking is concerned with restructuring such patterns and constructing new ones. Instead of looking at our past experiences only, we should start to search for answers in different directions because there is a whole sea of alternatives there.

We can look at problems from other angles and that is the way that I want to approach my architecture. I am still very young. I do not have many built projects, but I am trying very hard to look at each project as a new opportunity, a new way for me to test out ideas. I take each project of mine as an experiment of different ideas.

At some point I was interested in geometry. Simple geometry like this you can see every day from everywhere and most of the architecture is composed of simple geometries. When we look at other geometries, this is from a textbook, A Brief History of Time. When we look at metaphysics, we can begin to find other forms of geometries that are more interesting.

In order to describe the universe, the unification thesis, we begin to look at superstring theory. This describes geometries in multiple dimensions. This is the famous Klein Bottle, in which the interior surface flows out into the exterior and continues in itself. This kind of geometry is very interesting. I did a competition for a house of multiple dimensions in which I took this kind of multiple dimension geometries, the famous Mobius strip. The Mobius strip is a strip that when you cut it in half the centre, will not fall apart into two pieces but instead it forms a continuous loop, a larger loop. It is this outer continuity that interests me. I designed a house with a structure that is in accordance with this kind of geometry and maintaining a circular shape with a courtyard at the centre. In doing this kind of geometry, you begin to see that there the four surfaces of the tube begin to form one continuous loop.

When I apply different materials to it, it becomes a

very interesting structure. The space within itself is continuous and the geometry defines spaces. Some are large and some are smaller. We can begin to fit in our usual functions of a house.

This is the elevation of the house, which is a very dynamic. In this section you can see that sometimes the spaces are side by side with each other; sometimes they are one on top of each other. The interaction of the spaces are changing at every moment, every house. This is an interior view of the house.

As young architects we enter a lot of competitions, so this is another one. This is a Young Architects Award 2004 -- fortunately I won the competition. In this project, I wanted to tackle the urban problem. This is the photo that I took underneath the Island Eastern Corridor. Normally, a lot of people will be there but somehow these two people found a ship and go there to fish. This maybe is the only use of the space there. What I proposed is to tackle this problem with the insertion of a continuous band of greenery and some kind of performance spaces underneath, above and beside the bridge. The new band and existing bridge forms a continuous structure. New programs are added; old programs are removed to form a little mix of programs to enrich the experience.

These are a series of diagrams showing how I inserted the new functions and new ideas within the existing structure, existing environment. I derived a structure using some kind of gift from Shanghai. I designed a structure so that you will not obstruct the view and sunlight of the existing buildings. This is the final solution. It might be an alternative to the West Kowloon reclamation scheme.

Then I was interested in light at some time. Somebody asked me to design a Tibetan monastery, so I looked at the ritual of the Tibetan monastery. One of the rituals is that the monks will walk in circles around the central statue. I used this to derive a circulation pattern, a spiral from above ground to the underground, so that the longest path of enlightenment, of light, will filter through and progressively change the lighting conditions.

The final project is a geometrical form, very simple form but a very complex space. I was interested in movement also, so how people move. This is a real project. I was working with Rocco Limited for this project; it is a proposal for a cruise terminal in Tsim Sha Tsui. We started off with an idea of interweaving ribbons because there is a ceremony in cruise trips that people will hold ribbons with their relatives when the ship departs.

We studied how we do this cruise terminal as an extension to the existing harbour city, so we looked at the different levels of the cruise ships and the different levels of the harbour city and how we would connect them and how we could add a commercial element to the pier without disrupting its operation.

This is the circulation diagram. It is like ribbons using different levels together. This is the final form of the building. It represents ribbons and it reflects the circulation within the building. Some areas of the building, some interior spaces. The roof deck, all continuous spaces.

Of course, in the end I will touch a little bit of sustainable development. As one of our speakers has spoken before, sustainable development is a balance between the environment, the economy, and society. If we can preserve the environment, we can build a development that is self-sustainable in the economy. That means the developer has money to earn and respect our cultural identity, that means our past. If we can balance these three factors, then we can have human well-being.

One of our sites is in Guangzhou, the developer asked us to do a massive housing scheme on lateral sites. The scenery is very beautiful, so we do not want to destroy the land too much. In the end, we figured out a system in which we would do a matrix of houses that coexists with existing landscapes. We defined trees that we wanted to keep and we added in new landscape features. We added in new eco-ponds in which the water is self-circulating. We derived a system.

This is the great system of houses. How we distort the matrix of the site, we identified potential areas in which we can insert low-rise buildings, medium-rise buildings and we do circulation paths with minimum excavation.

In the end we have a matrix like a clothesline on top of the mountains, and we are trying to add in a lot of sustainable features like the use of sustainable materials. These are some of the views of the house. It is under construction now. I hope you enjoyed my talk.