

Bio-mimicry

I was very inspired and encouraged by these three videos. They answered many questions and doubts I have had about sustainability. It is only now that I have truly believed that bio-mimicry is the solution for a sustainable world. While I was fascinated about all the brilliant ideas, I have also had some thinking of bio-mimicry. I think there are three stages of bio-mimicry. First is mimicry of appearance. People started to learn from nature long time ago. The invention of airplane was originated from observing birds and the shape of submarine was a mimicry of fish. The second stage is mimicry of ideology, which is the stage of "smart grid" in the first video. It mimics the nature by using the ideas of self-healing, self-assembling, etc. The third stage is mimicry of principle, which is the bio-mimicry presented by Babak Parviz and Janine Benyus. It is the study of how nature and organisms are self-assembling, self-supporting, self-healing, self-cleaning, etc. This is the stage that our mind set are changed from industrial world view to ecological world view. And this is the way that we can build a sustainable world.

I was especially impressed by Janine Benyus. She presented 12 sustainable design ideas in only about 20 minutes, but the inspiration is not only 12 ideas. Estimated by scientist, the world we live has about 5 million to 100 million living organisms and only about 2 millions of them have been identified. I assume every organism has its unique characteristics that we can mimic about, then what we have known is only a drop in the ocean. It is a blast of knowledges. It is a revolution.

Later, I visited the website AskNature.org, I was thrilled that there are many practical design ideas that I was looking for for my building designs, such like Dye Solar Cell Technology that mimics the process of photosynthesis in plants. I found the possibilities that I can change the world as a future architect. I recalled the documentary "The Next Industrial Revolution". In the film, William McDonough, an architect, had worked with factories and corporations to reduce consumption, waste and toxic materials used in production. What he have done was beyond architecture. I can do it too and with all the helps of biologists, chemists and physicists, I can do better.