Exponential development

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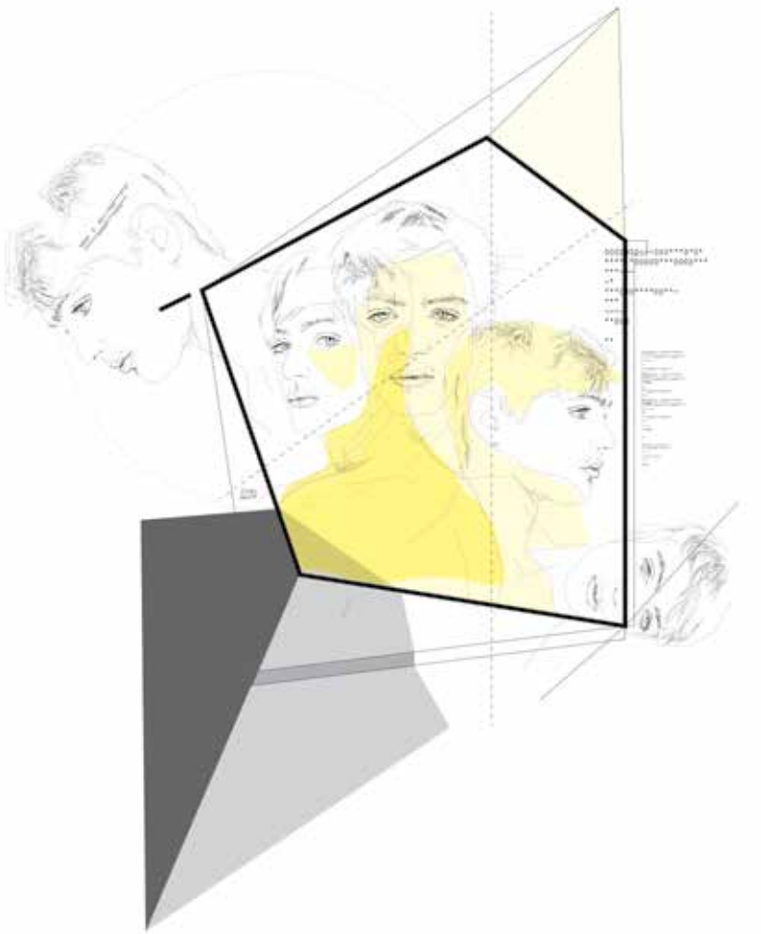

SOME YEARS AGO, I began to give lectures; never about my work, but rather on the vision we have in the office of the architectural endeavor, and I soon realized that I spoke very little about how to design and build buildings and public spaces, but I was referring more to our world view which, in the end, always finished molding my architecture.

One of the subjects which, little by little, became a recurrent theme and assuredly someone would say even an obsession, was the future. "We are all in the business of predicting the future" is a phrase which identifies me and which I repeat constantly; however, despite being convinced that most of us are in the futurology business – although many have not realized this – I see few efforts in daily life of trying to understand or develop ideas for possible future settings on the part of businessmen, academics or designers. In this search for tool in order to be able to better understand or predict "what is to come", some years ago we entered into an alliance with the Institute of the Future in Palo Alto, California, which opened a world of possibilities for us and left us with a desire to be aware of and to know more. In this way we arrived at the University of Singularity, also in California, and there is where we found one of the visions we have studied: the exponential future.

A group of technologies exists which, by contrast to what we have been doing as human beings for thousands of years, develops itself above the foregoing. A very simple example is: the following generation of 3D printers will be parts printed by a 3D printer. This type of progress is known as "exponential development" and one of its characteristics is the speed at which things change, a speed to which we human beings are not accustomed.

Rather than aesthetics, architecture will create spaces of life for people.

My belief is that today we see the world through a small window, a window which only allows us to see a small part of the film in which we see the commencement of the "exponential development" and we compare it with what we know, which is the "lineal development". And if one draws: 2+2 and 2x2, the figures appear the same until the number is greater, and then they begin to dramatically separate.

This point is where many will ask themselves: and what does that to do with what I do? Or, how is the design going to be affected? Beyond the manufacturing possibilities which give us the picture in 3D, the whole world is going to change radically, and not only in how we make things but also in th significance of things and their role in people's lives.

Neuro: prefix of the next decade.
Within exponential technologies, one which captures my interest is neurology or neuroscience. I am surprised that in the past 10 years we have generated more knowledge than that known during the past 2,000 years.

Today, many studies exist which show the relationship between space and memory, space and behavior, space and emotions, etc. And assuredly, in the following decade we will see how architecture becomes an increasingly inter-disciplinary profession. In the same way that neuro-marketing exists today, the concept of neuro-architecture will become increasingly accepted: an architecture which, helped by neuro-science, can permit that children with TDA (disorders from lack of attention) can have suitable environments for concentrating, or where patients with depression have spaces which promote positive emotions.

A theory called awareness of space exists in the field of neuro-science, based on the idea that a group of neurons exists in the hypothalamus (the spatial neurons) he principal function of which is to measure distance, limits, forms and direction. These neurons are literally the GPS of our brain. When has an experience, the hypothalamus is the last part of the brain to retain this complete experience before it become dust and remains in long term memory distributed in small pieces throughout our brain.

Should one wish to remember the contents of this experience, we begin by using the spatial neurons in order to remember, first, the space; it is as though space becomes the magical key of our memory.

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