

Light and Architecture

ETHEREAL MATERIALS

While making an Analogy between light and architecture, it is almost unavoidable to go back and consider the basic principles of the two. In this case the dual nature of both light and architecture is a key element to understand; if we want to compare them. This comparison helps to define and understand Lighting Design.

Architecture on one hand deals with the creation of spaces that are functional and that can be used by people with a certain purpose. On the other hand; it deals with the poetry of the same spaces, the combination of materials, shapes and light along with intangible elements that make these spaces special and powerful.

Light has also a dual nature; it possesses the properties of both particle and wave. Newton said that light was a corpuscular element, that is, made of particles. Later on a chemist, Young made experiments and discovered it behaved like a wave too. Then Einstein, in his attempt to explain a theory, required that light behaved as a particle and named it a "photon". What can be said is that light behaves like a wave in the radio wave end of the spectrum and like a particle in the x ray end of the spectrum.

It is true that when we design with light we only consider light as a wave. Even though it has been proved that when light shines on the surface of a metal, particles are ejected from the surface of the metal, we can not really say it changes the physical properties of all the objects it is acting on. But the power that light has to drastically transform materials, spaces atmospheres is immense.

Light is the one element that without being an object can be used to change a room and give it a different character. It has the same ability as a material object to transform a space. In this sense it can materialize an idea or a concept.

In conclusion Lighting Design is the ability of designing with an un-material element, light, to create different atmospheres and change the character of spaces, materializing the ideas of the designer.