

Lights and Shadows in Furniture: the Secrets of Lighting Design

Enlightenment of a closed environment is a theme that involves various aspects of design; as Stefano Dall'Osso, the successful lighting designer in the world, says, it is above all a matter of combining lighting technology with furnishing and art, from which to draw inspiration.

What is the boundary between these two apparently so distant disciplines?

The lighting engineering deals with the evaluation of the light requirements in closed environments, respecting the legislative directives, issued on the basis of optical and medical studies, in relation to the health of the human body.

A lighting project uses software, generally supplied by a manufacturer of lighting devices, thanks to which, by attributing the metric data of the environment, the color of the walls and the number of sources of natural light, its coefficient is deducted of light absorption and, consequently, the power necessary to illuminate it.

An extremely correct but arid procedure from an emotional point of view, which could be improved in this sense only in the following phase: that of the choice of lighting fixtures in the design phase of furniture.

At this point we are faced with exquisitely aesthetic choices, which in Italy are entrusted to the architect or interior designer, that is, to the figures who have dealt with the entire design of the furnishings or the home.

The figure of the Lighting designer is therefore misunderstood in Italy, while in other parts of the world he enjoys greater confidence and success.

To understand the essence of the Light project, whether for a prestigious residence, a small apartment or a working environment, it is useful to remember the theories on the solar spectrum and in general the relationship that artists have always had with it.

Goethe discovered that the beam of natural light, decomposed, contains in itself the colors; it transmits the texture of the materials to our eye in the furnished environment. All this affects our state of mind, giving us feelings of well – being or malaise that in the long run affect our spirit and our way of facing life.

It is therefore essential to make sure that the lighting of our spaces is balanced, through some simple measures.

The Skylight

The artists have taught us that natural light is a source of great well-being for the human soul: it is no coincidence that the Impressionist painters painted outdoor scenes in which the sunlight spread over the natural landscape and people, communicating a feeling of peace and harmony that still emanates from these works today.

The architectural animation element most used and loved by artists to illuminate their atelier was undoubtedly the Skylight: for example, the home of the painter Giuseppe Pellizza da Volpedo, author of the famous painting *Il Quarto Stato*, is equipped with a zenithal skylight designed by him, to reproduce the light of the exhibition halls but also and above all to enjoy the colors at best. Built in 1896 and restored in the nineties, today it is a destination for visitors from all over the world.

We can ask the Lighting designer-architect to design for our house this special window that is traditionally obtained from the ceiling, allowing a light beam illumination if well exposed. The Skylight was invented in northern European countries for those houses on the top floor where the windows on the façade were totally absent or very small. But there is also an artificial system for obtaining natural light in a dark environment: the solartube.

The Solartube

The solartube is a sort of telescope with a lens, which captures sunlight from the outside and projects it into the rooms. It is a real furnishing device that can be installed on flat or pitched roofs or in the upper part of the well exposed external walls, crosses them and presents itself on the internal walls as a ceiling-mounted luminaire , offering punctual lighting compared to the Skylight.

According to the project, both systems must coordinate with artificial lighting: the ways can be essentially two.

The first possibility is to ask the Lighting designer to replicate the lighting effect obtained during the day even in the absence of natural light, by arranging luminaires that diffuse the light at the same angles. So if daylight creates particular effects in the environment, the artificial one will prolong them with a skilful arrangement of the fixtures: for example, hot-light elements can be installed along the perimeter of the Skylight, highlighting the profile and obtaining a light coming from the same direction.

The second possibility is to arrange the artificial sources in the environment in a totally different way compared to natural daylighting. This choice gives dynamism as for a theatrical scene that takes on various aspects during the day and night. In this case you can indulge in the choice of lighting fixtures: the decorative LEDs of Athena, for example, with their simple and linear shapes can give discrete lights in several points without interfering with the style of the furniture, whatever it is.

The Light Art

The latest trend launched at the 2017 Venice Biennale , is that which turns Lighting Design into a real artistic action : the installation of Kasjo studio entitled Horizontal Interference, for example, consists of bundles of light cables stretched horizontally between the trees, which remain switched on all day, taking on different aspects based on the approach of darkness.

Finally, the work of Oliafur Ellasson, universally defined Light artist, has instead interested the furnishing elements themselves: called Green Light, the project consisted in designing tables and shelves, with the collaboration of product design Moroso, composed of geometric modules based on the isosceles triangle and on the cube, incorporating cold light lamps.

The result is a luminous object that, appropriately calibrated according to lighting rules, can fully satisfy the need for furniture, light, art and emotion in our home.