

LIGHT AND ARCHITECTURE

CÉSAR PORTELA

Architect

There is no need to define what natural light is, but we do need to remember that this light allows us to define what is around us, by day and night: the changing perception of the things or the bodies on which it impacts, and the space that contains them. Light, or absence of light, can also transform this space in each season, each day of the year, each hour of the day, each moment.

With regard to Architecture, What is Architecture?

Lao-Tse said that “*architecture is not four walls and a roof; it is also, and above all, the air that remains within, the space that these enclose*”. That is why architecture and light, or light and architecture are concepts that were interdependent throughout history, to the point that one of Bruno Zevi’s most important essays is called: “light as an architectural form”. Le Corbusier went as far as saying that “*architecture is the wise, correct and magnificent play of volumes collected together under the light*”.

This relationship between light and architecture occurs inevitably; sometimes consciously, other times unconsciously, and it does not matter whether we are talking about educated or popular architecture. That is why it is almost impossible to imagine the works of the grand maestros without establishing a masterly relationship with light. An example of all these, as a synthesis, is the Pantheon in Rome. Etienne-Louis Boullé claims that “*the art of touching with the effects of light belongs to architecture*”, and he is right, because, depending on how it is used, it can transform the spatial context, creating agreeable or disagreeable, sublime or mysterious sensations, the sensations of enlarging a space or making it smaller, or simply highlighting aspects of the space that interest us. And above all, it makes the space more agreeable, more comfortable, more habitable, more visible.

Painting too can move us with the play of light, as David Madacsi made clear in his presentation in this very conference. But light the light we see on canvas is the representation of a specific and personal form of interpreting it. Think about Velazquez, Vermeer, Rembrandt, or more recently, Sorolla, Van Gogh, Munch.





For all these reasons, the history of Architecture could also be told by referring to how natural light has been treated or, in other words, the different ways of making light intervene in the configuration of an architectural space, in accordance with different artistic styles, without forgetting that a large part of this history must be told in reference to star light.

From the Menhir to the cosmic complex of

Stonehenge, worshipping *light* and the astronomic perception in Ancient times to the *ornamented light* of Egyptian architecture, the *precise light* of Classical Greek architecture, the *light that is distilled* as it passes from the outside to the interior of Roman architecture – let us think again of the Pantheon -, the *divine light* of spaces devoted to the liturgy, the *protective light* that inclines people to meditation in Romanic architecture, the *supernatural light* through stained glass windows in Gothic architecture, the *humanised light* of the Renaissance, the *sublime light* of the Baroque period and the *fluid light* that allows us to use glass enclosures in contemporary architecture, which almost manages to eliminate the difference in light between the interior and the exterior.

Artificial light is quite different, invented light that comes from a fixed and constant source of emission and, therefore its effect does not vary and it obviously implies consuming energy and, far too often, it also involves visual “noise”.

When talking about Architecture, it is important to distinguish between *fashionable* and *avant-garde* architecture. Fashion and avant-garde are two concepts that, at times, may be the same thing, but have different, almost always contradictory meanings. Avant-garde movements were always concerned with essential aspects, which is why they break new ground and always remain in time, enlightening us and freeing us. Fashion or trends pay attention to occasional, phenomenological, contingent, formal aspects, and what they are really designed for is to go out of fashion. Fash-



ions in architecture enslave those who follow them and even those who promote them, the avant-garde, on the other hand, liberates.

Good Architecture has always identified more with the Avant-garde than with Fashion.

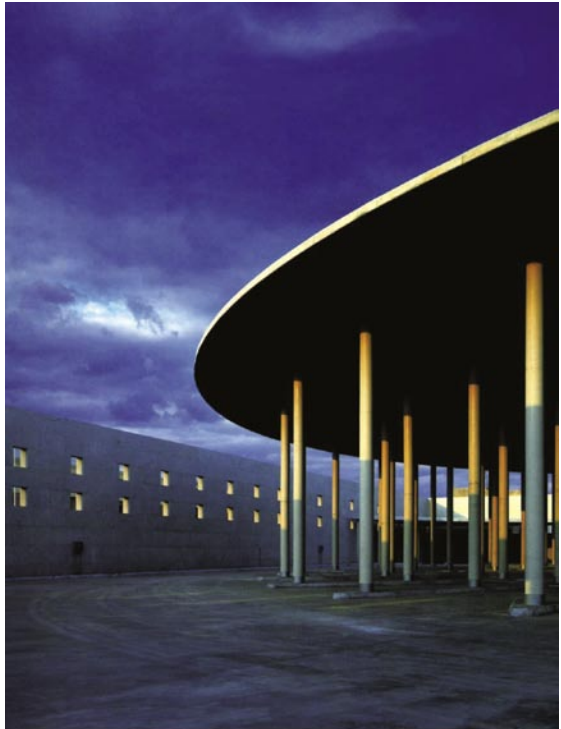
And as with good architecture, good lighting, illuminates, clarifies, stimulates. Bad lighting, like bad architecture, dazzles, confuses and produces weariness.

A film director friend of mine used to say that a good lighting director was just as important as a good actor for making a film. He said that an badly lit good expression or gesture is almost worse than a well lit bad gesture and vice versa.

Architects know, or we should know, that it is of prime importance to get the lighting right, whether it is natural or artificial light: the right light enhances and improves a space, bad lighting degrades it. The best lighting is almost always one that you do not notice. You sometimes enter a place and you cannot perceive it or appreciate what it contains, because the light blinds you. Other times, you go to an exhibition and the reflections of the poor lighting do not allow you to appreciate what is on display. And we should not forget what we were told in the cops and robbers films when they wanted to interrogate somebody, they shined a bright light in his face to weaken or destroy his physical and mental defences and he would end up confessing.

The pictures of some of my works contained in this article show the intention of playing with light, but as time goes by, I believe that it was the light that ended up playing with my works, rather than the other way around. And these works include the Cordoba Bus Station. When I designed the project, I wrote a text, from which I will highlight an extract, in which I believe the interest that both light and shade aroused in the conception of this work, is made quite evident: it says:

“When I was given the commission of the Cordoba Bus Station, a multitude of memories of my first journeys came to mind. Old memories that, in turn, fused with more recent memories about the Mosque and the courtyards of Cordoba, in the awning clad streets of Andalusia, with their space, with their light and their flowers, with the sound of water in the courtyards of the Alhambra, in the gardens of the Generalife and in the Alcazar,....., with the smell of the orange blossom, jasmine, rosemary, lady of the



night,....., with the colours of the glass in the vaulted arches of Cadiz and Havana, with the light and colour of the impressionists, with images of caravans moving through the desert and camping in oases, under star-studded skies.

When I thought about the solution and closed my eyes, I saw large stone walls delimiting spaces, defining them radically, but also joining them subtly, developing them. Bare, straight walls, orthogonal encounters, but also of circles, parabolas and ellipses inscribed in them.

I saw the light coming in strong and thick. And, on the other hand, shade and darkness, also dense, also strong, supporting these walls. And in a citadel, a Kasbah, a caravanserai, a souk, an accumulation of buildings and empty spaces between them, formed by different planes: some vertical, others horizontal, situated at different heights, some rectangular, others circular. All of these were there to defend the light, to dominate it, to capture it, to mitigate it, to bleed it conveniently, to attenuate it and distribute its radiance, to use it, once it had been tamed. I saw large planes of lethargic shade, or laid out as if they were and, at the same time, chinks of light everywhere, in movement, but no longer with the suffocating, blinding force of the exterior. I saw a more merciful light, once its radiant impulses had been broken, walking or moving in tune with the shade and both of these following the circular movement of time. I saw the light crashing against the granite walls that gave off thousands of twinkling stars, crashing onto the interior colour, on yellow, blue, green and white opalescent planes, all of which were stuccoed, creating calm when harassed by so much sun and glare, as Alejo Carpentier used to say about the colours of the frontages of Havana. I saw kindly nooks at these points where the shadow cast by objects moved into the space, creating mysterious, sensual atmospheres that were crossed by back-lit figures, with large, bewitched eyes that tore the half-shadow with their flashes and they took refreshment in them. That is what I saw when I closed my eyes and thought about the project.

I saw masterly geometries, with their exactitudes and their impositions. Essential, but also subtle geometries.”

The only thing that I want to call for with these sensations of my memories is the right use of light, be it daylight or nocturnal light, natural or artificial, as a basic and determining factor in the configuration of architectural space, and hence create more comfortable, more sustainable, more genuine, more human, more beautiful spaces and, therefore, better spaces.

