

Heritage lighting design and culture

Considering culture and people's expectations are a key part of the lighting design process, and necessary if a heritage lighting project is to succeed. From Japan to Mexico, lighting designers are taking local culture into account when illuminating historic sites.

Heritage sites embody the history and identity of a community or even a nation as a whole. Their exceptional nature often propels cities across the world to light them in the most spectacular way possible, to best showcase and promote these symbolic landmarks.

The lighting for the ancient Shirakawa-go village in Japan reproduces the moonlight

We should not design lighting with an international approach

The reasons are numerous: creating a distinctive nocturnal identity for a city, enhancing its brand image, making a site more appealing to tourists, and unlocking the potential financial return from a night-time economy.

But light is a powerful tool and should be used with care, especially when it comes to heritage sites which have such strong architectural characteristics and historical significance.

A sensitive and respectful lighting design response can ensure respect of the heritage

monument and all that it stands for.

Respectful of local culture

For Mexican lighting designer Gustavo Avilés, "Lighting design projects must always be rooted in local culture and heritage. They significantly affect the way that people relate to and inhabit public space."

Respecting the history and the legacy of the site is indeed an important element of a heritage lighting project. "We should not design lighting in a global and international approach," says French lighting designer Roger Narboni. The geography, history and local culture of the people who will use the illuminated spaces need to be understood. Making people proud of their culture and of their city's history is also important. As part of the design process, R. Narboni works with local lighting designers and architects to help him better understand the culture, as was the case in Dujiangyan, China (see box page 17).

Renowned Japanese lighting designer Motoko Ishii tries to design lighting for heritage sites and structures in a way that recalls "the era in which the structure was created," she says. "Ideally, I would like to design lighting that makes visitors feel as if they had slipped back in time to the period when the heritage structure was built."

M. Ishii is also attentive to the balance between yami (darkness), kage (shadow), hikari and akari (both mean light), an important cultural element in lighting buildings in Japan. Hikari is sharp and direct, like sunlight, but M. Ishii's work often depends on the use of akari – a good example



The green and gold colours chosen to highlight the river and palace in Dujiangyan, China symbolise immortality

of which is moonlight, diffuse and reflected. Using this, and based on the movement of the moon through the seasons, M. Ishii designed the outdoor lighting for the Shirakawa-gō village, a UNESCO World Heritage Site, in Japan.

The quality of sunlight itself varies from day to day and country to country, and there is a close relationship "between light and culture, and this knowledge is essential in the development of any lighting project for a city," says G. Avilés.

A practice in evolution

Over the years, lighting design for heritage sites and buildings has also evolved in the way it treats them. The focus has moved away from lighting the historic building itself to a more global approach.

"Lighting design," says R. Narboni, "has evolved from an architectural lighting approach to a more holistic approach including the landscape, urban forms and nocturnal ambiances for pedestrians living there or wandering around." Today it is more about taking into account the heritage site's surroundings and urban context.

Lighting a single building without considering its nocturnal urban context is "now totally absurd and even counterproductive," he says. "We need to think and design an urban landscape that integrates all the necessary buildings in the nocturnal image and not only the heritage ones."

As is the case in Quebec City, the historical centre of which is a protected UNESCO heritage site, where a lighting master plan is being implemented. The city and its stakeholder

Dujiangyan – rebuilding heritage with light

In 2009, Hangzhou-based lighting firm Zhongtai Lighting Group approached R. Narboni with a request to design the lighting master plan and river night-scape project in Dujiangyan, a UNESCO World Heritage site. The city had just survived a major earthquake in 2008 with most of its heritage monuments intact.

"I met the Mayor of Dujiangyan," says R. Narboni, "and started the lighting master plan for the city to help him reconstruct the city at night and develop night tourism around the rivers and the Yulei mountain pagodas and temples."

Taoist symbolism played an important role in the lighting master plan's design. "Taoist atmosphere and symbolism are still very present in the Dujiangyan area," says R. Narboni. "The harmonious relation between man and nature and the integration of the Taoist temples into the natural background guided our lighting. It is also why we have chosen gold and jade lights, symbolic of immortality, as main colours for the projects."

A cocktail of warm white, blue and green LEDs were used to create the jade colour on the river banks. The LED lighting is also continuous on facades, buildings, roof, banks and walls. Consequently, says R. Narboni, "it also gives a nice glowing and diffuse lighting effect."



LOCATION

Dujiangyan (China)

IMPLEMENTATION

Lighting Master Plan: September 2009 Date of completion: June 2011 (first phase)

STAKEHOLDERS

Contracting authority: City of Dujiangyan Lighting design in France: Roger Narboni, CONCEPTO studio – Frédérique Parent, and Virginie Van der Plaetsen, project leaders

Lighting design in China: Mao Cheng, project leader, Zhongtai Lighting Group, Shanghai

Technical design: Zhongtai Lighting Group, Chengdu

BUDGET

Size of project area: 48 000 m² Power consumption of the installation: 17 W/m² Installation cost: \$ 14 million



The Plaza de Armas, the main square in San Luis Potosi, Mexico

Should heritage sites remain in darkness?

Lighting should take into account the architect's original vision with regard to nocturnal illumination, believe museum director Tommi Lindh, and architect Jonas Malmberg at the Alvar Aalto Museum in the Finnish city of Jyväskylä. Alvar Aalto, the Finnish architect and designer, worked from the 1920s through to the 1970s.

T. Lindh goes so far as to say that any "lighting should be designed by the original architect or someone specialised in restoration of such sites, not a lighting designer alone."

"The lighting of exteriors or facades of historic buildings," says J. Malmberg, "is a modern means to emphasise valuable sites, so it may easily be contradictory to earlier thoughts and emphasise secondary things."

When designing buildings, Aalto also paid close attention to the design of light fittings, whose status, believes J. Malmberg, could be diminished if the exterior lighting is too bright.

"Night time is no different to day time when it comes to questions of integrity," says T. Lindh. "If modern masterpieces are illuminated to look like monsters, I don't think anyone benefits from that," he says. partners are lighting not just heritage buildings, like the city's bell towers, but other sites as well, such as roads and parks in the historic city centre.

Despite these broad principles, it remains difficult to identify a single ideal methodology to illuminate heritage sites. A case by case approach, sensitive to cultural context, is vital to ensuring that light brings an added value to a heritage site, and fully respects the architectural integrity of the building and the vision of the architect (see box on the left). A major challenge for any lighting professional, especially considering the attention that heritage monuments attract and the numerous stakeholders that play a role in their illumination.

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