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LIGHTING MASTERPLANS

ARCHITECTURAL LIGHTING OF BUILDINGS



Paris Edinburgh London Lyon

LIGHTING MASTERPLANS - Introduction

Holistic approach in the context of a whole urban composition.

Conflicting aims of urban activities.



Planning control on exterior lighting is necessary to protect the environment.

City night time improvement - Urban Lighting boosts the economy!



Masterplan at Custom Quay in Glasgow by RMJM Architects aimed at creating a stimulating 24 hour activity and regenerate the Clydeside riverfront.



Stuttgart City Centre.
Illuminated Landmarks:
The Tablat Tower The
Ring Road in Red
Lighting.

Lighting Masterplan for Stuttgart. Lighitng Design: Licht

Mirabella Urbis,2001.

Awareness of the benefits of lighting our Towns, Cities and Communities is growing.

Light as an element for a strong culture.

Birth of a new formal language derives from new technologies and new applications.

Lighting Design Profession as a global requirement.



Technical Lighting

Luminaire Design as a feature of urban spaces

Scenic Lighting

Coloured Light

Dynamic Light

.. 1950 ... 1955 ... 1960 ... 1965 ... 1970 ... 1975 ... 1980 ... 1985 ... 1990 ... 1995 ... 2000 ... 2005

Existing Planning Legislation.

Lighting Guides – Codes of Practice.





The World at Night!

Guangzhou, China, 2007.

Why we should Light!

Ambience









Lyon at Night.

Why we should Light!

Identity



Ladenburg, Germany Artemide, Rivoli.

Byzantine Water Supply Reservoir, Istanbul.

Why we should Light!

Safety



Guangzhou, China. Parking Site, Athens.

Why we should Light!

Security



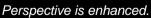


Road and Amenity Lighting: London, Athens, Spoleto – Italy.

Why we should Light!

Orientation







An overall Lighting Approach for the City of Guangzhou, China.

Why we should Light!

Promotion





Eurobank Investment, Athens

Editrice Abitare Segesta, Milan, Italy.

City of Guangzhou, China.

Why we should Light!



Spectacle







Palais Du Luxemburg, Paris.

Why Not Light!

Is Lighting Necessary or Desirable?

Acceptable lighting solutions in the Urban Context – Inappropriate in Rural Context.

Lighting used as a method to attract potential clients – Results in escalation in lighting levels.

Flat, uniform lighting swamps important Architectural and Historical installations.





Lighting Design Considerations

A mental Map – How do people understand the layout of a place?

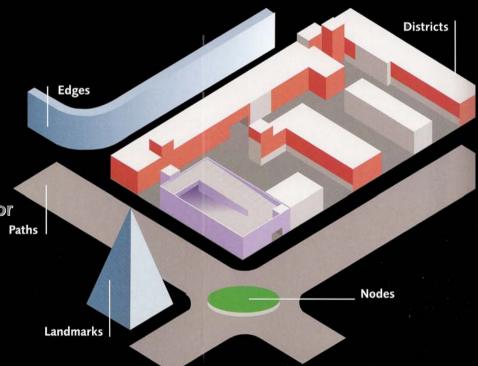
Paths: Streets, trails, circulation.

<u>Edges:</u> Perceived boundaries: walls, buildings, shorelines.

<u>Districts:</u> Sections of the City with some identity or character.

Nodes: Focal points, intersections.

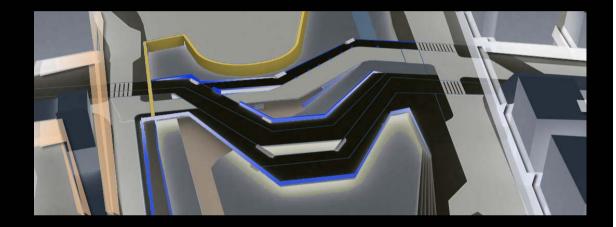
<u>Landmarks:</u> Readily identifiable objects serve as reference points.



"The Image of the City", Elements of a Masterplan, according to Kevin Lynch.

Lighting Design Considerations

- 1. Functional
- 2. Architectural
- 3. Amenity
- 4. Promotional



For Functional and Amenity Lighting there certain European and Local Authority Standards .(CIBSE LG6)

However for Architectural or Promotional lighting things are more subjective and will depend upon the relative brightness of the surroundings and the character of the area.





Lighting Design Considerations

Classify the area.

Suggested headings.

Example Area	Functional	Architectural	Amenity	Promotional
Civic	××	××××	×××	×
Commercial	××	×	×××	××××
Conservation	×	×××	××	
Entertainment	×	××	×××	××××
Historic Core	×	×××	××	
Parks and Gardens	×	xxx	××××	××
Residential	×		××	
Retail	××	×	××××	×××

Edinburgh Castle at night.



Zaha Hadid Architects- Urban Planning.



Lighting Design Considerations

Identify Aims and Objectives of the Lighting Masterplan.

Choice of the principal Lighting Sources.

Which Parts of the City should Dominate - <u>Lighting Levels</u> In relation to district brightness.

Hierarchy-Ranking between lighting levels of other City Elements.

Traffic Lighting for the Greater City in balance with the whole scene.





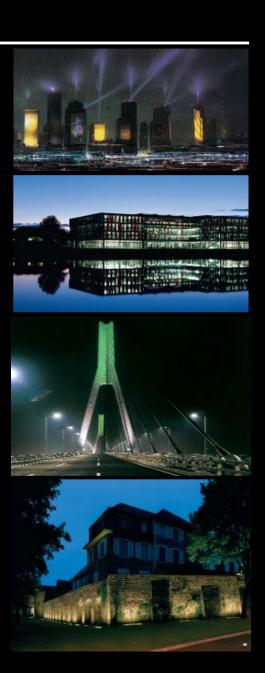
The Status quo of Lighting Masterplans.

Masterplans arise from Urban Planning Departments in collaboration with Professional Lighting Designers.

Extremely dynamic Lighting market in Europe.

Economical growth and development in Asia includes lighting concepts in their expanding cities.

New energy saving codes require all Local Governments to modernize their Urban Lighting systems.



Paradigms









Stuttgart

Paradigms



Edinburgh



Liverpool

'We want more buildings lit because people will feel safer and so there are social benefits, but balanced against those are energy and maintenance costs'.

'The first thing is to try to be selective in what we light, rather than just blasting light on Everything'.

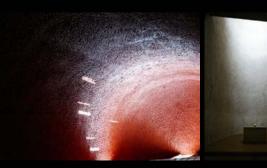
'Some sort of Legislation surrounding the use of energy sources is necessary'.













Lighting Buildings of Historical Importance

Landmarks become more likely to be chosen as significant if:

- They have a clear form.
- They contrast with the background.
- -There is some eminence of spatial location.



Lyon Cathedral



Patra Cathedral. Lighting Design Mara Spentza Awarded 'Young Lighters of the Year 2006' CIBSE, Society Light and Lighting, ILE Institute of Lighting Engineers, U.K.

Lighting Buildings of Historical Importance

Design Considerations

Style



Via Garibaldi Lighting Design : Artemide Italia Genova, Italy.

Lighting Buildings of Historical Importance

Form - Contrast



Aristotelous Street Façade Lighting Design : Artemide Thessaloniki Greece.

Lighting Buildings of Historical Importance

Shadows



Via Garibaldi, Genova, Italy, ARTEMIDE Architectural

Lighting Buildings of Historical Importance



Colour

Maizonos Street Façade, Patra, Greece Lighting Design: Artemide, Greece.

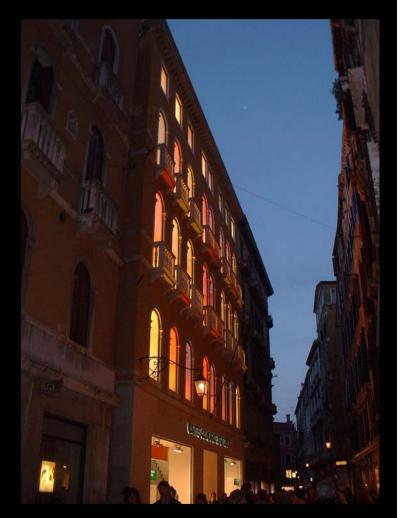


Lighting Buildings of Historical Importance

Should the building be lit?

Does the entire building need to be lit.

Which are the significant architectural elements of the building. : Pediments, Columns, Porticos.



Venice, Italy.

Lighting Buildings of Historical Importance

Two more factors need to be considered:

- The required appearance of the building In terms of its background and surroundings.
- -The need to bring out colour, texture and detailing.



Via Garibaldi, Genova, Italy, ARTEMIDE Architectural

LIGHTING MASTERPLANS - ARCHITECTURAL LIGHTING OF BUILDINGS.

'Architecture is the learned gamed, correct and magnificent, of forms assembled in light'.

Le Corbusier.







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