

LIGHTING DESIGN

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Assistant editor

Jennifer Hudson



MARRING

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Designed by Michael Phillips, Archetype

Printed in Hong Kong

Downlights

Uplighting

Wall and ceiling lights

Spotlights

Table lamps

Chandeliers

Specials

Light sculptures

6 Introduction

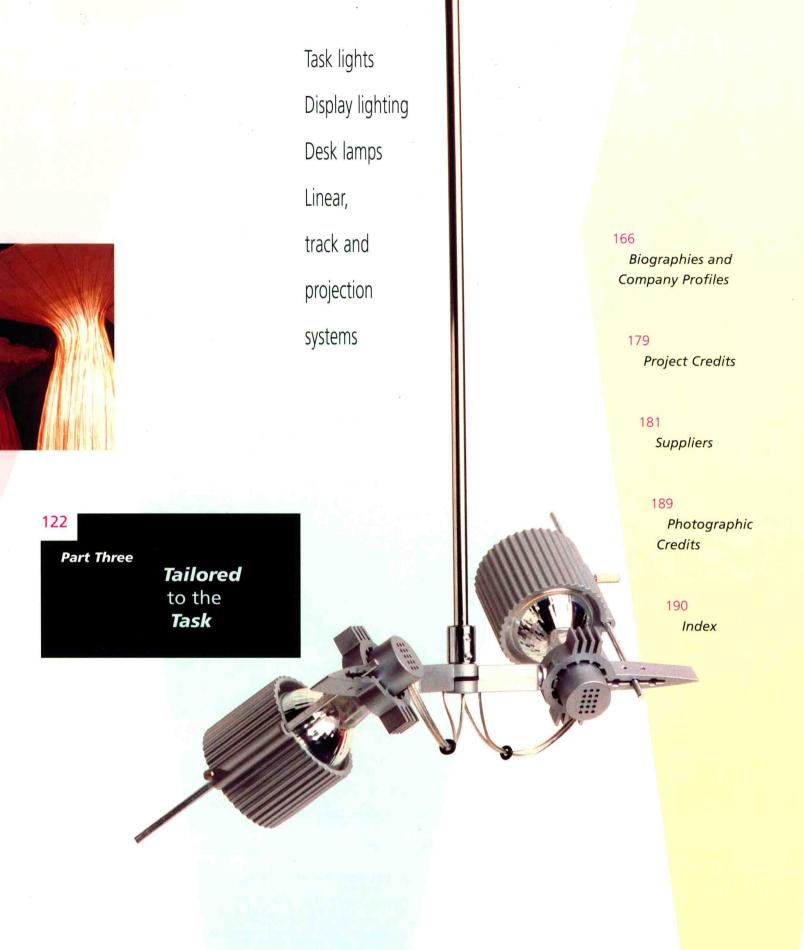
Close to the Source



Part One
The
Architecture
of Light









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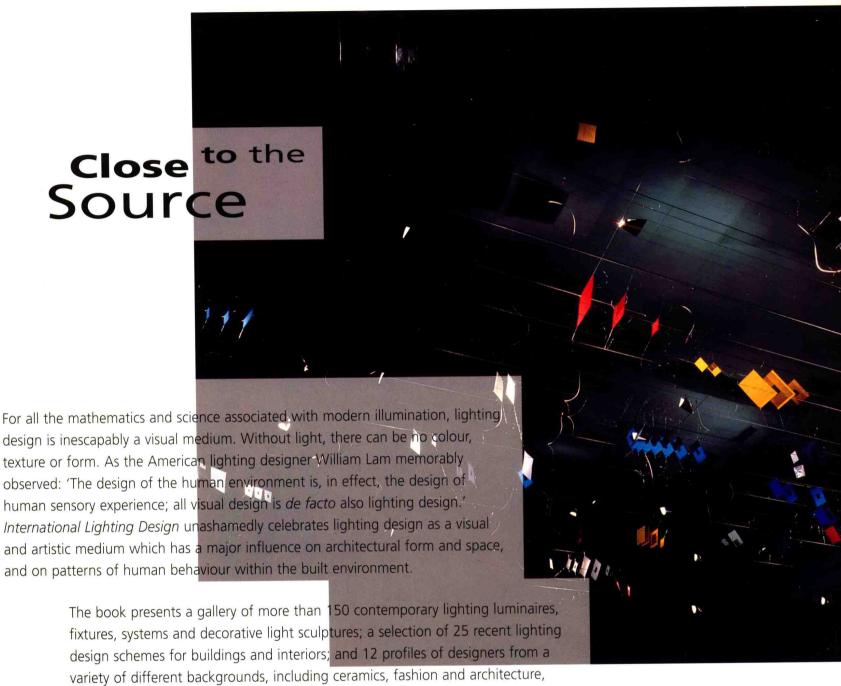
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In particular I am referring to the traditional division between the world of light fitting or luminaire design – design of the instrument or fixture that directs and diffuses light – and the design of *light itself* within an architectural environment. Also, decorative light objects designed chiefly for domestic use rarely share the same pages as more technical lighting equipment for commercial or 'contract' interiors.

in isolation.

who are developing new and alternative ideas in the field of lighting products. By focusing on the artistic and aesthetic potential of lighting, as opposed to the purely technical calculation of illumination, this publication seeks to unite within a single volume different facets of lighting design which are too often considered



Ingo Maurer

Installation
YaYaHo ahaSoSo

for the 'Design and Identity' exhibition (Louisiana Museum of Modern Art, Humlebaek, Denmark, 1996)

> Metal, plastic, multi-mirror reflectors, lacquered, silver-plated and gold-plated square paper screens Low-voltage halogen light source

There are historical reasons to explain why so many key strands in lighting design should have developed apart from each other. Lighting has occupied artists and designers for centuries. Long before the invention of electric light, architects studied the revelation of their buildings in sunlight and shadow, and poets, painters and sculptors eulogized about shooting stars, volcanoes, fireworks, rainbows and crimson sunsets, about the phenomenon of the naturally lit world. But it is only in the last 100 years that we have enjoyed the tools and technologies to produce and direct artificial light to our own design.

The first lighting designers of the modern era were the Art Nouveau glassware artists at the turn of the century. Louis Comfort Tiffany in America, and Emile Gallé and the Daum brothers in France instinctively understood the aesthetic importance of inventor Thomas Edison's successful development in 1879 of the world's first incandescent halogen light bulb – or lamp, as the lighting trade prefers to call it. These artists produced decorative stained-glass light fittings to incorporate electricity. Their glowing artefacts, with bases shaped like trees and shades in the form of butterfly wings or leaves, swiftly caught the public imagination. The age of gaslight and waxed candles was over.

So began the evolution of the modern electric light fitting, partly rooted in the decorative arts and partly rooted in industrial design, which continues to this day. It is a field that has advanced constantly, spurred on by technological development (primarily new materials and new light sources), social and economic change (the rise of a home-owning middle class) and aesthetic movements (from Art Deco and Machine Age themes to Post-Modernism).

At the beginning of the twentieth century, as the interiors of homes, hotels and clubs began to sport the first decorative electric light fittings, another entirely different form of lighting was developing in mines, tunnels, factories and offices – the outposts of industrialization – which enjoyed little or no design input. This lighting was strictly utilitarian, designed only to provide the most basic illumination with no aesthetic or sensory dimension. The German artist and

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architect Peter Behrens is credited with producing the first utilitarian lights for factories during his time as artistic director of the giant AEG industrial company in Berlin in the years directly before World War One, but very soon such light fittings were being designed anonymously and indiscriminately for mass production.

So a pattern was set. More ornamental fittings and fixtures to direct and diffuse light were in the hands of industrial designers, artists and, to a lesser extent, architects (Charles Rennie Mackintosh and Josef Hoffmann both designed light fittings for their buildings). The greater the formal and aesthetic content of the light fitting, the greater the involvement of the designer. But purely functional light tools for, say, factories were given little design

consideration as artefacts, and *application* of light within commercial spaces became the exclusive province of electrical engineers who calculated light levels using rigid scientific formulae and excluded more subjective criteria based on the senses. Even those architects who fretted endlessly about the effects of natural light on their building would tamely surrender the decision-making on use of artificial light to scientists and engineers, with their charts and light-meters at the ready. The result was much bland and indiscriminate application of light. This trend was exacerbated by the invention of the fluorescent tube at General Electric in America in the 1930s.

It was not until a pioneering group of stage lighting designers in America in the 1940s and 1950s began to take their skills outside the theatre into public and commercial spaces that artificial lighting was given any real artistic consideration in architecture. The work of Abe Feder, today the grand old man of American lighting design, proved to be as significant in achieving a breakthrough in lighting design as Tiffany had been earlier in the design of light fittings. Feder lit the New York opening of *My Fair Lady* and the Orson Welles production of *Dr Faustus*, but significantly he moved beyond the playhouse to design, amongst other things, the lighting for the Rockefeller Center in New York, the *Queen Mary* ocean liner and public plazas in Atlanta.

Hagia Sophia

Erco Lighting in co-operation with Total Aydinlatma Mümessillik, Istanbul.

A marble ritual vessel on the main floor of this historic place of worship is illuminated from an upper gallery by pairs of Eclipse spotlights. Casino Magic Exterior
Biloxi, Mississippi, USA

Gallegos Lighting DesignArchitectural floodlighting illuminates the Casino's towers and planes with computer-choreographed colour.

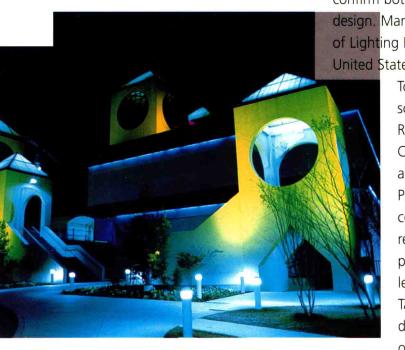
Feder and his peers brought the creative techniques of theatre, in which lighting design complements sets and costumes and underwrites the artistic intent of the production, to building and interior design. Their work established a new architectural lighting movement which prepared the ground for the current generation of international lighting consultants, many of whom trained first in stage lighting. The American tradition in lighting design, which emerged from the theatre, regarded lighting in terms of what you could see, not what you could measure. The message was that you should not trust light-meters, you should only trust your own eyes.

Analysis of the lighting schemes selected for *International Lighting Design* will confirm both the theatrical heritage and the current vibrancy of American lighting

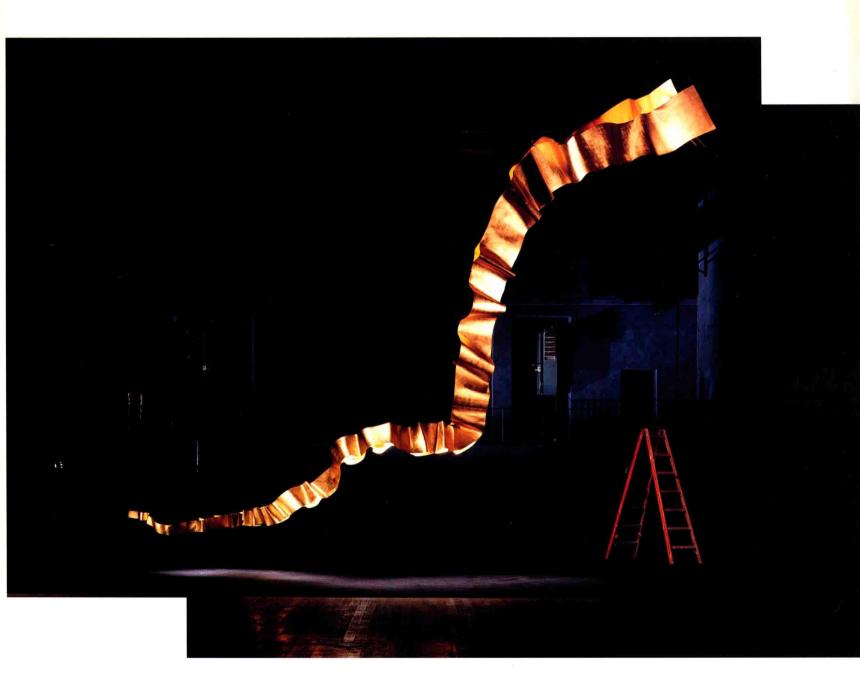
design. Many of the chosen projects are winners of the International Association of Lighting Designers (IALD) Awards, the most prestigious awards scheme in the United States. Paul Gregory's spectacular colour-changing design for the Entel

Tower in Chile (featured on page 110), Paul Marantz's richly seductive scheme for the Mexican Gallery in the British Museum (page 148), and Ross De Alessi's sensitive treatment of the Santa Barbara County Courthouse (page 164) all demonstrate an indefinably creative intuition allied to technical mastery of light source and luminaire technology. Paul Gregory trained and worked first in the theatre, as did UK consultant Andre Tammes, whose firm Lighting Design Partnership is represented in this volume by an innovative scheme to light a pedestrian walkway at Manchester Airport (page 162). 'You have to learn to trust the intuitive process as a lighting designer,' says Tammes. 'Light doesn't exist until it strikes something, so lighting designers have to be concerned with the colour and texture and form of the physical materials the light strikes, not just with the lighting equipment. There is a duality to the thinking.'

Many of the lighting schemes in *International Lighting Design* deal with the problems of combining artificial light and daylight. Others are intricately bound up in building restoration. All subscribe to the philosophy outlined by the nineteenth-century stage designer and prophet of modern lighting design technique, Adolphe Appia, who said: 'Shade and shadow are equal in importance to light



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itself'. But if some of the finest lighting schemes *per se* have their origins in the mature lighting practices of the United States, it is Europe and Japan that are setting the pace in luminaire or light fitting design. In some cases, the products being developed by such talents as Germany's Ingo Maurer or Japan's Kazuko Fujie are so ambitious in conception that they bridge the divide between luminaire design and lighting design. Maurer's lighting for Ron Arad's foyer areas in the new Tel Aviv Opera House and for the Louisiana Museum in Copenhagen,

and Fujie's Flying Lights for a bridge in Kumamoto City, belong to a hybrid category of lighting installations in space which work on two levels – as art objects in their own right and as instruments that create light quality within an environment.

Maurer in particular is adamant that maximum light effect should be achieved with minimal effort, and he argues that many current lighting projects go to extremes in terms of utilizing the technology available: 'I don't mind architectural jewels being lit up,' he says, 'but large corporate offices on the way to the airport are lit like castles and I don't like it!' Maurer's work over the past 30 years has been a personal expression of beauty and poetry in light, whilst constantly utilizing technological advances, especially in light sources. Other designers, too, from a variety of disciplines, regard the light fitting as a suitable vehicle for individual creative experiment. What French fashion designer Jean-Charles de Castelbajac describes as the 'natural eloquence' of lighting has been a magnet drawing every type of designer to the challenge of the luminaire. The result,

as this volume shows, is a wealth of creativity in a variety of media – from the glowing bone china of Japanese ceramicist Masatoshi Sakaegi to the organic crushed silk forms of Israeli fine artist Ayala Sperling-Serfaty and the ensemble of frosted polycarbonate by Barcelona-based architect Jorge Pensi.

Ayala Sperling-Serfaty

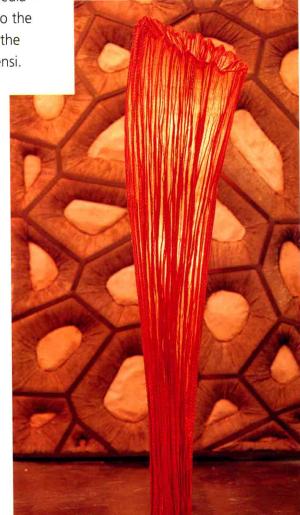
Standard lamp
Mermaid
Metal, silk
h 160cm di 35cm
h 63in di 13 ¼in
Limited batch production
Manufacturer Aqua
israel

Ingo Maurer

Ribbon of Gold

designed for the Tel Aviv Opera Inauguration, October 1994

> Gold-plated aluminium 230w halogen bulb 1800cm drop 500cm 1315in drop 196%in One-off



Some of the lighting products in this volume belong to the utilitarian tradition of fitness for purpose in lighting. They are increasingly discreet and compact, in response to the progressive miniaturization of light-source technology; they emphasize energy efficiency and they perform their task unobtrusively. Other luminaires are overtly fun or iconic objects – limited edition lighting artefacts bearing the often idiosyncratic signature of their designer, whether it be the Villiers Brothers, Katrien Van Liefferinge or Weyers and Borms.

However, the line between style-led and function-led lighting has been increasingly blurred since workplace lighting forms such as track-lighting and spotlights entered the home, and influential manufacturers such as Flos of Italy began to promote an industrial-chic look in the 1960s. Some fittings in my selection belong to both camps in that they are conspicuously fit for their purpose whilst making a strong visual statement as objects. Danish designer Knud Holscher's *Zenit* uplighter for Erco, for example, is a precision office uplighter with an intriguing wing-like profile; Isao Hosoe's desk light is shaped like and named

after a heron (see page 125). These are, in the words of industrial designers Perry King and Santiago Miranda, 'soft tools'. King Miranda's engaging new work for Sirrah (page 20) and Louis Poulsen (page 135) subscribes to this dual philosophy.

design imagination, both in terms of the light specials, sculptures and

Hartmut S. **Engel**

Spot system

Dancer 33

Die-cast aluminium, polycarbonate, plastic Max. 100w 240v tungsten halogen bulbs Various sizes Manufacturer Staff, Germany All of these cross-currents in lighting are expressed within a simple editorial structure for International Lighting Design which unites products, people and projects in three main sections. 'The Architecture of Light' discusses luminaires which are an essential part of

the architectural fabric, alongside lighting schemes which effectively define the architectural experience. 'The Art of the Decorative' takes us into the realms of beauty, fantasy and