

From the depths of world history

The lighting design for the Lost Worlds exhibition in Doha/QA set the scene for life long lost.

Text: David Atkinson, Kai Becker
Photos: Nick Woods

Museums and exhibitions do not only present works of art and objects of interest for their own sake. Exhibition designers also give a lot of thought to the didactic goals – in effect, what visitors will be able to learn from the experience. Light can play a crucial role as a provider of information, as is shown in the Lost Worlds project.



Doha, the capital city of Qatar, started to attract more attention worldwide in 1996, which is the year when Doha's Arabian broadcasting station Al-Dschasira went on the air. Around eight years later, in November and December 2004, an exhibition aroused the interest of the Arabian public: Lost Worlds, an exhibition project that was organised by the Natural History Museum, London for the Qatar National Council for Culture, Arts and Heritage. Lost Worlds attracted a lot of attention because it was the first exhibition of its kind in the world to showcase the splendours of past life on earth. Visitors marvelled at a collection of some astonishing and rare treasures from the natural world dating back to the time of the dinosaur with the awe inspiring diplodocus and triceratops skeletons. Many rare and exquisite fossil specimens and some of the beautiful and fascinating creatures that have already been made extinct by our own human activity, and others that are on the verge of extinction, were shown.

The brief was to come up with a dynamic creative lighting design to cope with the scope and scale of the exhibits. Theatre and architectural lighting designer David Atkinson and his team were assigned to do the job. The design process took several months of schematic ideas and research of suitable types of lighting that would enhance small objects, graphics, and large exhibits such as the large diplodocus and triceratops skeletons. In the latter case, the lighting designers experimented with full size prototypes. Due to the number of highly sensitive conservation items within glass showcases, the lighting design team opted for a custom designed fibre optic system.

A lighting design concept was developed for each of the five exhibition areas: Ancient Giants, Hunters of the Seas, Land before Man, Ancient Wings, and a section entitled In Our Hands devoted to life forms threatened by extinction in the present day. An Introduction space prepared visitors for the contents of the exhibition. This was further enhanced by funnelling people on arrival through a purpose-built tunnel, which was lit to a subdued level by low level recessed three-watt LED fixtures amplifying the impact and scale of the main exhibition space.

Having come through the tunnel the visitors did not get to perceive the entire central exhibition hall in one go. To maintain the tension created in the passageway, visitors first only got a glimpse of the first two parts of the exhibition. The reduced lighting in the tunnel had prepared the viewers' eyes for a dark, high-contrast exhibition space, which meant that the effect of the illuminated exhibits was even more outstanding.

The lighting concept was designed to lend drama to the illuminated exhibits and their surroundings. To achieve the desired effect, the majority of lighting fixtures were mounted on high-level trusses which enabled some carefully calculated acute angles (19, 26 and 36 degrees) across the large exhibits (3200 Kelvin), as well as the perimeter walls (5700 Kelvin) and graphics (3800 Kelvin). The use of varying colour temperatures enabled the lighting to bring out the quality of the different materials and finishes, and make strong contrasts between

the various areas and elements within the exhibition. To compliment the high level lighting many of the smaller exhibits and text graphics were lit locally by custom designed fibre optics.

But to return to the visitors: their impression of the well-lit dinosaur skeletons against the dark background must have certainly come across as dramatic. Following the Ancient Giants section, they were led into the prime-



The reception area at "Lost Worlds", a British-Arabia exhibition project.

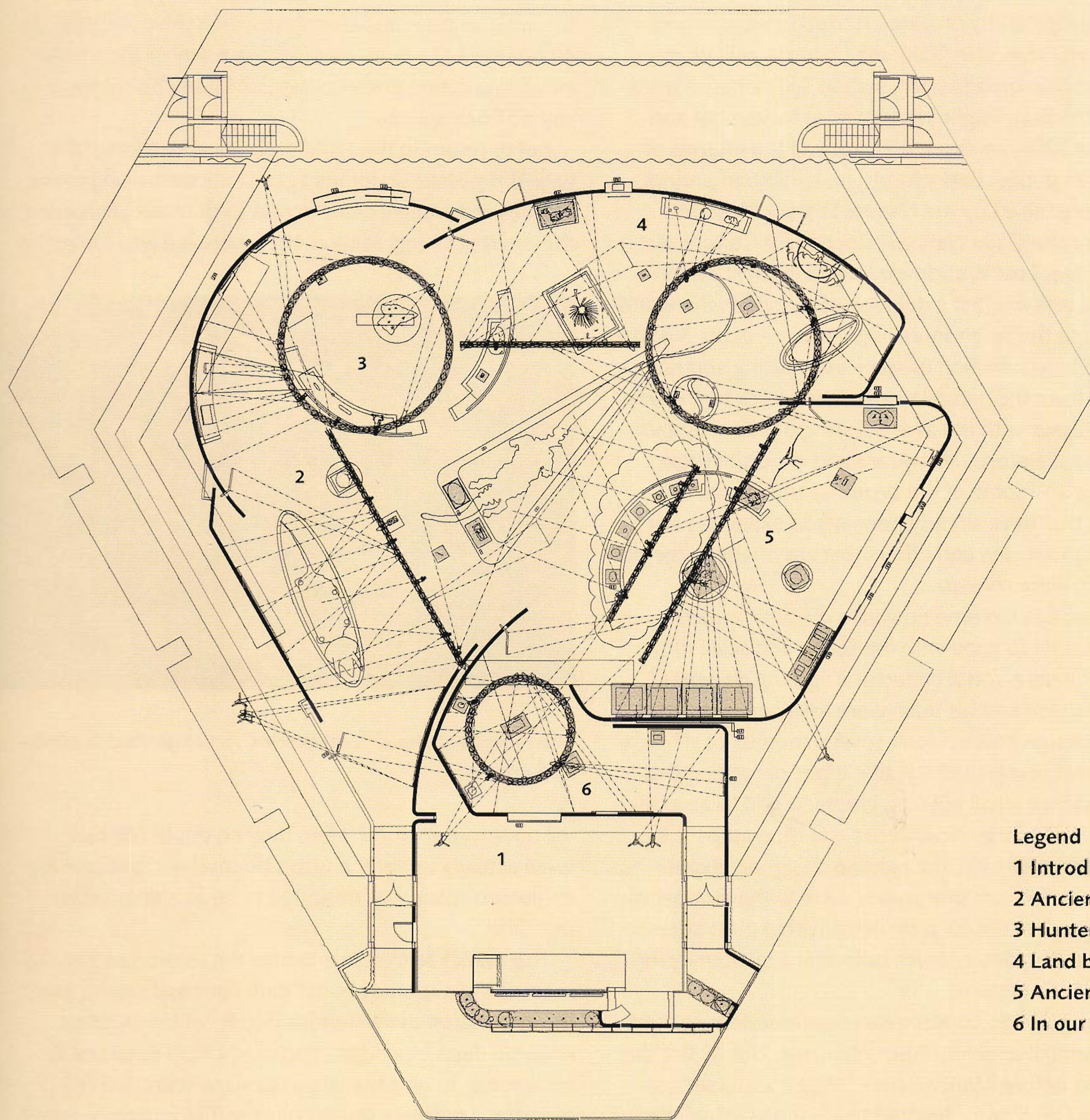
val underwater world. Here they no doubt felt they were actually under the water themselves, because the exhibition space was designed to be as authentic as possible.

The murals served to enhance the tension and excitement of the experience: the dark floor and ceiling gave the impression of mysterious depth, which together with the deep blue light, made for a truly deep sea atmosphere. To give the large seascape mural a three dimensional quality a series of linked T16 battens washed the mural in cyan. This light underlined the different shades of blue in the mural, which were designed to portray the way daylight infiltrates the deep-clear water until all colour fades to black.

Many of the murals were juxtaposed by fossilised exhibits, which underlined the plausibility of the graphics, which themselves were only a reconstruction of reality; they were illuminated by optical fibres.

This exhibition space also included a fossilised exhibit on a large round plinth, which was lit directly from above by a single ETC source 4 profile fitted with a diffusion filter to soften the edges of the beam.

The first four sections of the exhibition sensitised visitors to the Lost World and all the creatures that have become extinct. The last section drew their attention to endangered species today. This didactic move presumably fell on fertile ground, because the space was lit so realistically and dramatically that viewers could not help but be reminded of their responsibility towards the living creatures threatened by extinction today. A standard, less dramatic presentation would not have had this potential. The exhibition design together with the lighting generated a level of drama that brought the Lost Worlds back to life to a certain extent. The exhibition was a huge success with over 114,000 people visiting it.

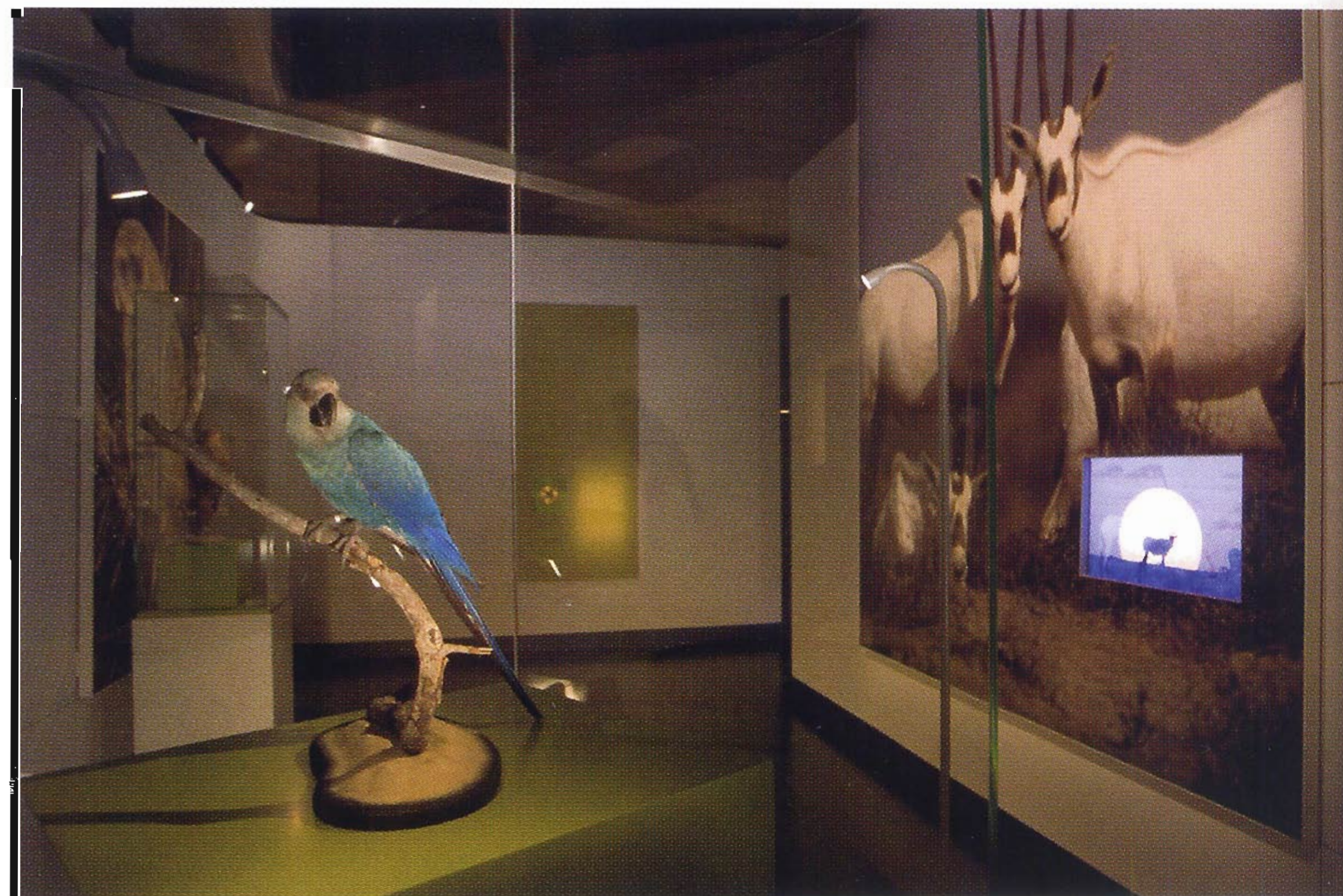


Legend

- 1 Introduction
- 2 Ancient giants
- 3 Hunters of the seas
- 4 Land before man
- 5 Ancient wings
- 6 In our hands



The low light levels in the tunnel prepare the visitors' eyes for the lighting conditions in the exhibition itself. The space opens up slowly in the direction of the exhibits, the dramatically lit dinosaurs looking amazingly realistic against the dark background.



Light-sensitive exhibits are illuminated using fibre optic technology, which produces negligible heat and makes for easy maintenance.

**Project team:**

Lighting design: David Atkinson Lighting Design; David Atkinson (Principal), Stewart Parker (Assistant)

Electrical engineering:

Reed Engineering Services & Point Source Productions

Exhibition construction: Scena

Exhibition design: Pentagram

Products applied:

ETC Source 4 Profiles, 19, 26 und 36 Grad, 575 watts, PAR with medium und spot lenses (on trusses)

Selecon Lighting— Acclaim PC, 650 Watt (on trusses)

Commercial Lighting Systems:

Square LED with glass filter, 3 watts (tunnel)

Encapsulite: T5/16 batten, 35 watts with Sky Blue sleeve (mural)

Universal Fibre Optics (UFO): 150 watt metal halide projector; 50 watt low-voltage projector with dimmer; 100 watt low-voltage projector with dimmer, custom designed heads (small exhibits)

Viabizzuno: M2 DN70 MR16 downlight (ticket desk)

Filters: LEE Filters

Intalite: M2 to MR 16, 50 watt, 36 degree downlight (ticket desk)