

Lighting & Sound

November 1999

The Entertainment Technology Monthly

Peace in Paris

- Eurhythmics back in action after 10 years

The Lion King

- Disney's latest musical hits the West End

Genetic Modification

- Birmingham's newest nightclub, DNA

Third Rock from the Sun

- Behind the scenes at CBS Studios

Stone Forest

- Laser and light spectacular in China

Theatre of Form

- Unique theatre from Hotel Pro Forma

PLASA

PROFESSIONAL LIGHTING
AND SOUND ASSOCIATION

As the latest Disney musical offering hits the West End stage, Rob Halliday reports on how the production has successfully made cartoon characters tread the boards

Lion King Roars In

With the 1994 appearance of the stage musical *Beauty and the Beast*, a new part of the Disney empire was born: Disney Theatrical. Through clever costume design in particular, that show managed to translate many of the visuals of the film onto the stage to create a spectacular pantomime that could run year round, around the world.

The question it didn't immediately answer, though, was what Disney Theatrical would do next. How many times would the public take a stage show filled with people dressed as scaled-up versions of the on-screen characters - giant plates/candles/teapots - before accusing Disney of following a formula? Especially when renting the video costs just a few pounds, while taking a family to see the stage show is starting to edge into hundreds of pounds.

Strangely, the project they chose next was perhaps the least likely candidate from their back catalogue: *The Lion King*, a more complex story with shades of *Hamlet* rather than pantomime. Evil uncle Scar kills the lion

cub Simba's father, the lion king Mufasa, in order to take his place on the throne; the cub enters self-imposed exile, eventually returning home to triumphantly rescue his kingdom. Even if that story could be told, how would it be staged? Actors dressed as *Cats* had already been done, and that show was still running!

Despite the doubts of many so-called experts, the show opened in 1997 to triumphant reviews, in a production that re-invented the film in a style that encompassed the musical sounds of Africa (through the work of South African composer Lebo M) and presented it in a uniquely theatrical manner. The show swept the 1998 Tony Awards winning the best musical, best director of a musical, best choreography, best set design, best lighting design and best costume design categories. Now, after a two year wait, London has its chance to sample the show that is still wowing audiences every night in New York.

DESIGN

The *Lion King's* distinct visual style stems from what many considered to be Disney's bold choice of director - Julie Taymor, a multi-skilled artist billed not just as director, but also as costume designer, mask and puppet

co-designer and author of additional lyrics for the show. Her productions over the years have become renowned for their use of puppets and masks, and this continues in *Lion King*. Her early fascination with the show came from the challenge of portraying the variety of creatures required without resorting to fluffy, Wizard of Oz-style lion costumes with actors completely hidden inside.

The eventual solution, evolved through a long pre-production period, was to create masks that have the lion's head floating above the performer's head, keeping the human visible while clearly defining who they are playing. The masks of the principal male lions have a further trick: mask and puppet co-designer Michael Curry devised a mechanism that allows the lion head to suddenly lift up, forward and away from the actor, the effect suggestive of a lion's mane rising as they confront each other.

The concept of revealing the performer inside the animal became the guiding principal for the rest of the cast, and is achieved in many ways. Giraffes, for



THEATRE

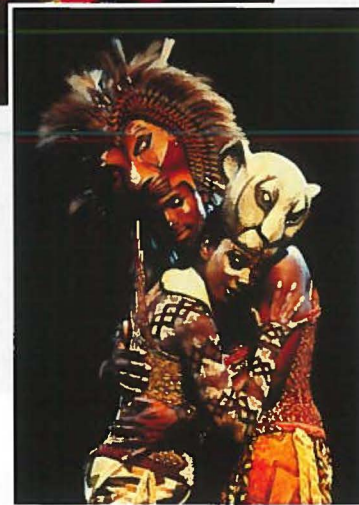




The most complex feat of engineering is the floor. Downstage this contains three lifts that can drop right down into the substage area to allow performers to be set and then rise up to stage level.

Upstage is a section of flooring that is automated to allow it to be raked for certain scenes, and within that is the complex, nine tonne drum revolve. This can be used as conventional turntable, but also houses the raised spiral of Pride Rock; one half of the revolve's surface turns and opens and, as the revolve turns further, the semi-circular Rock telescopes up and unfolds into position.

All of the scenic engineering was carried out by Delstar Engineering, with the scenery built by Terry Murphy Scenery and the rigging work by Vertigo - the same three



companies who collaborated on the London version of Beauty and the Beast, and it works well - the low noise levels as scenery moves being particularly noticeable. Control for the revolve and the flying pieces, all of which are automated, was by Jetter Automation, a name more familiar to those who specify automated handling systems for factories than to theatre practitioners.

The show's long fit-up period was masterminded by production managers Stewart Crosbie and Simon Marlow, along with production carpenter Mickey Murray, Vertigo's project manager Ken Mehmed and, it seems, most of the carpenters working in London. The potential nightly backstage chaos, with scenery and animal costumes stored in every spare centimetre of the Lyceum's wings (with 14 chain motors simply for storage), is now run by stage manager Greg Shimmin with the show called by deputy stage manager Claire Libbey - from the traditional British wing location rather than the front-of-house location initially suggested by the American producers.

LIGHTING

"I had a good time in London: the crew were outstanding, one hundred percent behind the show, albeit with lots of friendly ribbing - both ways!" is how lighting designer Don Holder recalls this, his first experience of working in the West End. The team garnering the praise was led by UK associate lighting designer Alistair Grant and production electrician Pete Lambert and included Chris Dunford and Steve Reeve, plus a selection of guest electricians, all working alongside Holder's US associate Jeanne Koenig Rubin and VL programmer Aland Henderson.

Audiences clearly love this show, enjoying it for its beauty and magic rather than trying to analyse what the masks mean or study the hundreds of years of international theatrical tradition that lie behind them. That, perhaps, is Taymor and her team's triumph. all the way."

example, are a performer standing on two short stilts who leans forwards propped up on two longer stilts that become the animal's front legs, with the long neck-and-head resting upon their own head. The effect, particularly in silhouette, is stunning. More difficult characters take the split between character and performer further: Timon the meerkat - one half of the typically-Disneyesque comedy duo with warthog Pumba - is the extreme, a complete character puppet attached to the front of his performer and manipulated by movements in the performer's torso, arms, legs and head. This puppet is the most Beauty and the Beast-esque in the show, and could easily have been an actor in costume. But it is remarkable how quickly one stops watching the performer and focuses on the character he is bringing to life - while at the same time fully aware of the work the actor is doing.

The scenic environment supporting these creatures was created by designer Richard Hudson, well known in the UK for his work for subsidised theatre and opera companies. Zimbabwe born and educated, Hudson turned to these African roots for his design which had to allow Taymor's varied creatures to be presented in what appeared to be the vast open plains of Africa, while also taking the audience to the other locations demanded by the script. The design looks simple in picture or model form - but even the expansive Lyceum had to have its basement excavated further to accommodate the set's mechanics.

The basis of the set is a big open space backed by an enormous cyclorama. The stage space is made to feel 'epic' because the cyc isn't hemmed in by the usual black legs and borders. Instead, the legs are white light boxes that extend the feel of the cyc to the side of the stage, while the borders are white cloths with curved edges that feel like floating clouds - both can be covered with black masking for the darker, spookier scenes such as those in the elephant's graveyard. Flying (including performer flying by Foy) and tracking modify the space further. Two huge skeletons are trucked on for the elephant's graveyard (which also features a compressed-air powered smoke geyser effect devised by Howard Eaton Lighting, to replace the expensive-to-run liquid nitrogen effect used in New York), while the stampede that leads up to the death of Mufasa and Simba's subsequent exile is achieved using an upstage scrolling painted cloth then a series of rollers containing increasingly-large wildebeest models with side portals creating a valley; an old-style effect, but an effective one.

Holder's aim for the London production, as with all of the departments, was essentially to re-create the American show; that design won him the 1998 lighting Tony award. However, he notes: "We were aware of the concern about the economics of the production, particularly because ticket prices in London are lower than in New York. But we'd also already done the show a number of times, in Minneapolis, New York and Japan; this experience let me go back through and take some things out of the rig. The result is fundamentally the same, yet the rig is cleaner - and the whole production feels richer and denser."

The core of the rig is moving lights - by a quirk of history, Lion King's moving light rig is practically identical to Beauty's (Disney had a leased Vari*Lite package from a Beauty tour which closed early and just moved it over) with a sizeable core of VL2Cs and VL4s backed by just a few VL5s and VL6s: four High End Studio Colors on the circle front round out the rig. London continues with this rig partly because the show exists in Artisan format, and partly because the lighting team haven't yet found a match for the VL4 washlight that does a great deal of cyc lighting work in the show.

The sizeable conventional rig became the subject of a fierce bidding war that ended somewhat controversially with the contract awarded to Westsun in Canada, who have supplied the American productions of the show. The majority of the equipment and cabling in the rig appears to be new, as the company quickly learnt about the UK and West End markets - in particular the need for CE marking and the requirement to permanently install equipment for long-running shows. Production electrician Pete Lambert notes that the advantage of having everything bought specifically "was that we could specify exactly how we wanted things, down to the lengths of tails on multicores," and the result is a beautifully neat installation.

It is also an enormous one! The Lyceum's existing 400-odd Strand LD90 dimmers are all used. But 345 new ETC Sensor dimmers in seven racks have also been installed in the grid, one running from a 110V transformer and feeding the 110V elements of the rig, such as the 240V-unfriendly lines of seven M16 flood battens called for by the width of the set. The new dimmers were installed by Stage Electrics (who carried out the original dimmer installation during the Lyceum's refit, and are now servicing the show for Westsun); they are fed from a new mains supply run up from the basement by RWS Electrical, who also installed new, Howard Eaton Lighting-built patch boxes with Socapex outlets around the grid that allow the rig to be neatly plugged up. The dimmers are controlled from an ETC Obsession 2 located in the theatre's followspot box, since the room set aside as the lighting control room doesn't actually allow a view of the stage! Vari*Lite control is now from a mini-Artisan 2, after an Artisan was used to program the show; the consoles are now run, and the rig maintained, by the show's resident electricians team of Rachael McCutcheon, Alan Boyd and Duncan Elsam.

On the ends of the dimmers hang over 600 ETC Source Fours and the huge array of floodlights that the cyc, borders and side lightboxes demand - 100-plus conventional L&E 3-circuit Ministrips, plus over 70 custom Ministrips mounted in the leg lightboxes. There are also a line of fluorescent floods at the base of the cyc and 35 Altman T3 six-cell flood units (12 flown, 23 as groundrows); these and the RDS Scene Machine effects projectors had to gain CE approval prior to being used in London. The DMX network also controls 170 Wybron ColorRam scrollers, 18 High End Dataflash strobes (these mounted into short-nose Par can housings to reduce flare), five 2.5K RDS Scene Machines (used for clouds and projecting the tiny dots that form one stunning transformation sequence) and two Pani BP2.5 projectors, mounted on a circle front bar re-engineered to accommodate their depth. Custom rigging was also created for the on-stage ladder positions, sections of which are hinged and tracked to allow them to roll out of the way of passing scenery.

With a large cyc, lightly-coloured floor and white legs and borders, one of the most challenging aspects of the rig became controlling flare: practically every lamp in the rig has a top-hat, the insides of these covered with flocking material. Lambert and his team are also now intimately familiar with every light leak in every type of lighting fixture after spending a day covering them with countless rolls of blackwrap! →



CUTTING EDGE WIRELESS

Sennheiser is the World's No1 manufacturer of RF systems. For live music, theatre and broadcast, Sennheiser offers professional, utterly reliable and flexible performance. They have the finest choice available - and the awards to prove it. • But it's not just world beating products that have led to the Company's dominance in wireless. Sennheiser's planning consultancy and customer support network are second to none. When you buy a Sennheiser RF system, you can be sure it's exactly right for your specific needs and, wherever in the world you travel, you will never have to worry about local frequency legislation. Sennheiser will be there for you. • The majority of top West End shows choose Sennheiser RF systems. Countless performing artists, venues and conference centres around the world make Sennheiser their first choice. • Sennheiser - a cut above the rest.

 **SENNHEISER**

Sennheiser UK Ltd, FREEPOST, High Wycombe, Bucks HP12 3BR.
Tel: 01494 551571. Fax: 01494 551549 E-mail: info@sennheiser.co.uk



The rig - particularly the cyc lighting - works hard through the show. Taymor's animal costumes are seen to best effect when in silhouette, and the silhouettes that Holder creates are big, bright and intense; the punchiness allows the feeling of the brightly-lit sky to be retained even when light is added downstage to build big, bright daylight states. What's interesting is that Holder's lighting seems to reflect the show as a whole in dividing into two quite distinct styles.

There are the beautiful, heart-stopping moments where the magic of masks, puppetry

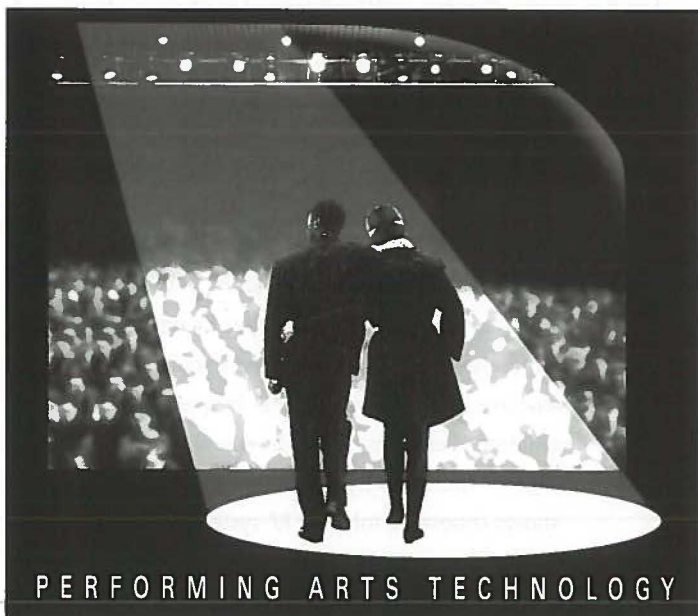
and simple, elegant theatricality are used to their fullest effect, the most notable of these being the show's opening sequence. The houselights fade, the colourful abstract frontcloth rises and light reveals firstly clouds rising up into space then a colourful, cloth sun rising slowly rising from the floor. The first animals - those giraffes - appear on stage. Suddenly birds are flying overhead. Then the edge of a gobo in the auditorium catches your eye and, as you turn, you realise that an elephant is lumbering down the stalls past you! The sequence builds and builds, the African chanting slowly resolving into the

familiar form of Circle of Life, the hit song from the film, as the stage fills with creatures of all types and Pride Rock then rises to reveal the king, the queen and their newly-born lion cub.

Then there are moments that seem somehow to owe more to Disney than to Taymor: a character sauntering on stage singing the eighties pop hit 'The Lion Sleeps Tonight'; another quipping that the scene "wasn't like this in the film", while the Vari® Lites do a rock-and-roll sweep out over the audience. Holder handles these moments with style, though, as he does the moments where the lighting has to solve the purely technical challenges of hiding the 'tricks' (such as performer flying lines) or silhouetting the miniature puppets used in some scenes. But it is the cyclorama, in particular, that lingers in the mind: dressed with floods, but then with areas picked out using the Vari® Lites; its triumph is that it is never quite symmetrical, never quite even, which is what makes it live as a spectacular sky rather than just a well-lit cloth.

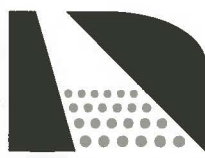
SOUND

The sound design for Lion King is in the hands of Tony Meola, who also worked on the more recent Hunchback of Notre Dame for Disney in Berlin. Bidding for this element of the show was again fierce - understandably, given the general expectation that the show will run and



PERFORMING ARTS TECHNOLOGY

Lighting, Sound and Communications
Systems for Performance Spaces.
Design, Manufacture, Installation.



Northern Light

Performing Arts Technology

Edinburgh
Assembly Street,
Leith, EH6 7RG
Tel: 0131-553 2383
Fax: 0131-553 3296

Glasgow
79 Loanbank Quadrant,
Govan, G51 3HZ
Tel: 0141-440 1771
Fax: 0141-445 4406

London
Business Design Centre,
Suite 305.52 Upper Street,
Islington Green, N1 0QH
Tel: (020) 7288 6250
Fax: (020) 7288 6251

www.northernlight.co.uk

e-mail: enquiries@northernlight.co.uk

LIGHT ENGINEERING



2000 Mirror Glass Displays

(includes 4 rotators)

The ultimate festive gizmo for your millennium event.
Each digit revolves independently.
Can be hung or will stand on a shelf or bar canopy etc
Quantity trade discounts apply - telephone for details.

2 sizes to choose from:

15" (380mm) £395 per set

32" (813mm) £995 per set

Tel: 0208-520 2336 Fax: 0208-509 1332

64 Eden Road London E17 9JY

run - but the contract was eventually awarded to Autograph because of their proven ability to support even the most complex shows. Autograph's Andy Brown also served as UK sound associate, working alongside US associate sound designer Marie-Renée Foucher and assistant sound designer Kai Harada once the show moved into previews and Meola jetted off to his next project.

The installation of the rig was overseen by production sound engineer Thomas Ashbee, another Disney veteran after filling the same role on *Beauty and the Beast* in London. Though large, the basic rig isn't that outlandish in current musical terms. Vocals are collected by 40 Sennheiser SK50 radio microphones, some of these permanently attached to masks rather than to the performer's heads, and presided over by Nihal Badik and Paul Gatehouse. The orchestra, located in the pit with the exception of two percussionists who are housed in auditorium boxes either side of the stage, are miked with a wide assortment of microphones from Shure, Sennheiser, AKG and Neumann, and the resulting feeds are collected by a 99-input, 14-subgroup, 14-VCA Cadac J-type mixing console with 89 of the faders motorised, run by Nicky Matthew.

This sound, along with a few effects replayed from Denon DN-995R MiniDisk players, then passes through Meyer CP-10 EQs, BSS TCS-804 delays, Apogee DA-800 and SA-700 amps and out to what appears to be a very small loudspeaker rig, particularly around the proscenium arch. This is, in part, because vocals are fed out through four LA-28 speakers from Walt Disney Imagineering - wide-dispersion column speakers created for the theme parks that look like narrow tubes and are visually unobtrusive when mounted on pros booms. These are backed by six Meyer UPA-1Ps, six UPA-2Ps and four USW-1P speakers, all self-powered. Tom Ashbee comments that his work has suddenly become much more like the lighting department's, because he's dealing with a mains installation rather than just low-voltage signals.

Each speaker is individually fed in case of problems. The rig also uses Apogee SAT-3 and AN-1000x loudspeakers as front-fills and as a surround-system used for effects and the vocal sounds of animals who enter from the rear of the auditorium during the opening sequence, with the whole rig equalised using the Meyer SIM system.

More challenging for Ashbee has been the complex detailing required by the system. The opening sequence animals are hidden in a section of the stalls bar prior to their entrance and therefore needed coverage for both radio mics and the stage management's radio comms - yet this area was a radio blackspot. Local antenna therefore had to be concealed above the bar with the cabling then following a complex route back to the stage ("there was one particularly nasty void, and in the end we went and bought a crossbow and used that to shoot the draw-line through!" the ever-inventive Ashbee recalls).

Video monitors were also installed in the bar area, working as latecomer monitors for most of the show, but switching to show the conductor on an event from the Cadac.

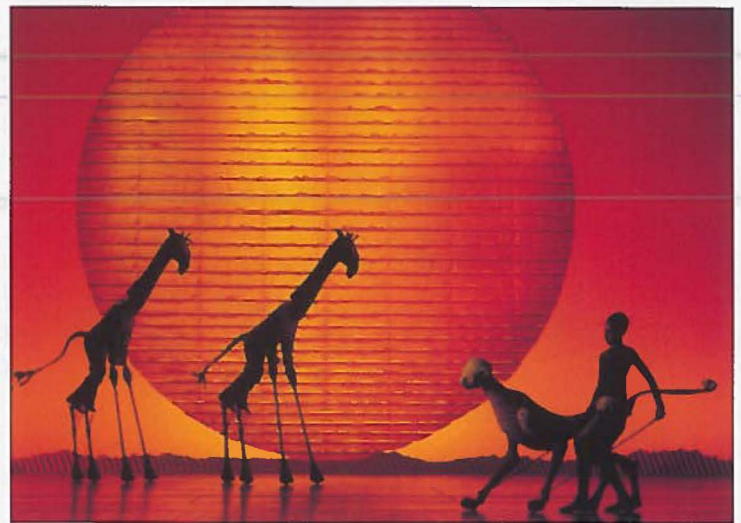
The complex comms requirements also led to the decision to install a separate feed to each Clearcom comms pack, fed from an Autograph-designed power supply that cuts off a pack in the event of a fault, leaving the rest of the comms system undisturbed.

All this somehow left a few dull moments in the long fit-up, which the sound team filled by firstly fitting plexiglass side panels to either end of the sound desk, then adding show logo decals. Bored again during previews they installed ropelight to upright the logos - and were planning to finish off this project by wiring the ropelight to the houselights, so that it faded gently at the start of the show!

The show's sound, for the most part, fulfils Meola's stated ambition of making a sound that is "lush, as it is on the albums and in the film". As with *Hunchback*, it's not in-your-face sound, but rather takes the vocal sound and presents it to you neatly, clearly and cleanly. It also manages to deal with the challenge presented by the younger audience present at the show, lifting the vocals

over their general ambient hubbub, the rise and falls of which clearly show which bits of the show bore them and which enthral them - though it is slightly sad that they don't get to see the final moments of the curtain call, their view obstructed by the adult audience who rise to give the hard working cast a standing ovation.

A real ovation, though, with cheers and whistling and boos for the bad lion, not a forced 'we've paid our money, we feel we should stand' ovation. Audiences clearly love this show, enjoying it for its beauty and magic rather than trying to analyse what the masks mean or study the hundreds of years of international theatrical tradition that lie behind them. That, perhaps, is Taymor and her team's triumph. That and proving that a Disney



musical doesn't just have to be padded cartoon costumes!

But even the success of this show leaves a question unanswered. For their differing styles, all three of the stage shows (*Beauty*, *Lion King* and *Hunchback*) have effectively had the benefit of extensive try-outs in film form. Disney haven't yet mounted a successful new, theatrical show from scratch. To see whether they can achieve that we must wait for *Aida*, opening in Chicago in December and (they hope!) coming to a theatre near you sometime soon after that!

photos: Catherine Ashmore/Kirwin Millard

Unit 7 Admiral Hyson Trading Estate Hyson Road London SE16 3PA

Vertigo[®]
Rigging Ltd

Hire
Sales
Height Access
Design & Fabrication
Drafting & Plotting

Tel: 44 (0)7071 200099 • Fax: 44 (0)7071 200077
email: info@vertigo.org.uk