# Mary Poppins

Rob Halliday talked to members of the ALD and ABTT about the Disney's 1964 classic movie coming to life on the London stage. The movie pushed the boundaries of technology of the time to integrate animation and live action, but for the stage version, a more traditional approach was adopted

#### Chapter One – From Film to Stage

I was introduced to lighting at school and went on to join the National Youth Theatre, where I learnt the lighting trade. I continued my education doing a degree in computers, but admit to having spent too much time in theatre.

How did I get into professional lighting? People I had worked with at the National Youth Theatre gave me my start, touring with the English Shakespeare Company. A couple of years later, a happy accident led to my working with David Hersey which gave me experience on musicals such as *Oliver!*, *Martin Guerre*, and *Miss Saigon*, programming moving lights for him – perhaps my computer background did have some relevance in theatre! Working on shows with David and others took me around the world – *Les Mis* in Australia, *Martin Guerre* and *Putting It Together* in America and, most recently in this country, *Miss Saigon*, *Highland Fling* and *Rebecca*.

The lighting designer for *Mary Poppins* is Howard Harrison. I've worked with Howard on a number of shows as programmer and/or assistant. It's noticeable how programmers and lighting designers form teams. Lighting designers rely on their programmers; they have to trust them to be able to interpet their language – 'I want a blue blobby gobo over there' can mean completely different things with different LDs. If the relationship works, they keep working with them. I think the difference between what we used to call a 'board operator' and a programmer is that a board operator is reactive, whilst the programmer is proactive.

*Mary Poppins* was originally a series of stories written by P L Travers, first published in 1934. The stories tell of a magical nanny and the adventures she leads her charges, Jane and Michael Banks. Walt Disney personally persuaded Pamela Travers to release the rights, but it took further twenty years from securing the rights to releasing the film in 1964. Julie Andrews starred in the film, fresh from her success in the stage version of *My Fair Lady*. Her co-star was Dick Van Dyke as Bert.

That the origins of *Mary Poppins* come from a series of novels can be seen in the modular structure of the film. The original movie version was created by Disney's screenwriters and the men behind the songs – Richard M Sherman and Robert B Sherman.

In the movie version Bert is several characters from the books rolled into one multiskilled journeyman, and the word 'supercalifradgilisticexpialidocious' was a Sherman brothers invention. Getting *Mary Poppins* onto the stage became a convoluted problem, as Disney owns the rights to the songs, but producer Cameron Mackintosh owns the stage rights to the books. Neither could do it without the other. However, Disney is also now a theatre producer (*Beauty and the Beast, The Lion King,* and *Aida.*) A meeting between Thomas Schumacher, head of Disney Theatrical and Cameron Mackintosh in December 2001 resulted in an agreement for a co-production – unprecedented for both companies.

What to put on stage? Disney's stage musicals have been straight adaptations of their films, albeit sometimes (as with *The Lion King*) using very theatrical designs. But Cameron was a friend of Pamela Travers and she entrusted him to look after her character after her death. There was also the problem that some of the film was, perhaps, unstageable. So the stage version is somewhat different from the film. Mrs Banks is no longer a suffragette; there are no dancing penguins – sadly; but 'Supercal' is still in!

Cameron and Tom Schumacher gathered together a really strong creative team: Richard Eyre (director), Matthew Bourne (co-director and choreographer with Stephen Mear), Julian Fellowes (book), Bob Crowley (production design), Andrew Bruce (sound design). The Sherman brothers' finest songs were retained and new musical material was provided by composer George Stiles and lyricist Anthony Drewe.

## Chapter Two – The Production: opening out of town

The production took almost two years in its creation. An old fashioned approach was adopted: opening the show out of town before bringing it into London. The Bristol Hippodrome, a fabulous Frank Matcham theatre, was chosen. The audience is on three levels and the theatre has a dome that can be opened to let in daylight (until we hung a front truss), and even gas secondary lighting until very recently.

The sets involve an enormous range of locations, both real and magical, and presented quite a challenge: the Banks' family home at 17 Cherry Tree Lane, the bank where the father works, St Paul's Cathedral, the rooftops of London and a magical park and street market.

Bob Crowley has made the house the centrepiece of the design where much of the action takes place. Bob and Richard Eyre wanted to emphasise the image of a dysfunctional family with father in one room,



The house

mother in another, children in another. Mary Poppins will bring this family back together during the course of the show. The design also had to deal with the practical constraints of two theatres. The Bristol Hippodrome stage was the bigger of the two, but had little room for storage while the show was in construction. Neither theatre has enough wing space, so scenery is stored flown on motors in the wings. In addition, the show had to break-down easily to enable it to be moved from one theatre to the other in two weeks.

The house has three main rooms: hallway, study, and sitting room with open bedrooms above, and tracks up and downstage. Upstage it splits again into three – the central section and two side sections. This is because in London the central section stores in an upstage 'garage' in the theatre while the side sections then move off into the wings. These trucks are constructed of aluminium sheets for low weight.

The house is driven up and down stage by on-board motors with a front flipper floor section, hydraulically lifted. It contains other motors for effects – such as Mary sliding up the banister – and also contains on-board dimmers for lighting and with many Marcaddy cable drums feeding these trucks!

The nursery, in the roof of the house, is a flown platform that can either land on top of the main house truck to complete the house, or can fly in all the way to the stage. There is also a roof section that can fly in on top of the nursery with actors on top of it, if necessary. The flown nursery and roof are 35' wide and are picked up at either end by steel cables. They are guided by two side-stage towers and lifted by a motorised counterweight system, driven by three 22kW motors. There is another motor in the roof section for the chimney lift that allows performers to 'pop up' onto the rooftops.



Bristol production desks



The floor and walls of the nursery are actually separate flown pieces, since at one point they split. The towers weigh approx 10 tonnes, are both floor standing and supported by extra steelwork in the theatre's grid - towers and flown house pieces total 40 tonnes of suspended load. The stage right tower contains a passenger lift to take actors to just below grid level when they have to preset themselves in the nursery or on the roof.

Other scenery such as traditionally painted cloths are used to set locations. Tracking translucent panels are used for the park, while

other scenery runs on and off in tracks - park gates, statue plinths, the kitchen, chimneys and lamp posts. Scenery is controlled by 12 crossstage winches, 15 Big Tow counterweight-assist winches for flying with some manual flying.

Another important element is the multiple performer flying such as Mary's arrival and departure, Bert's proscenium tap-dance, and Mary's final departure when she flies up through the auditorium using more Big Tow winches. The auditorium flight uses Stage Technologies' Visual Creator.

There's an important difference between programming lighting and programming automation: actors can get hurt if the automation programmers get it wrong. The automation was by Stage Technologies using an Acrobat console running Chameleon software. Alex Hitchcock, a hero for his calm, ordered approach, programmed the automation.

#### Chapter Three – the Lighting

There's a textbook approach to lighting design: read the script; talk to the director; watch rehearsals; design a rig; focus the lights; light the show. But with a show of this size and complexity the order needed to be changed. The fit up started on 11 July 2004 - a week before the cast started rehearsing. Rental companies need lead-times to order gear so the shop order was sent out in May. This meant that the rig had to be designed in April with no blocking, the script not finished, some songs

Stage Technologies' Acrobat control desk



not finalised and some not even written. David Hersey's philosophy is "*find what space you can and fill it up with useful stuff*." This approach has become easier since the advent of moving lights.

The problem on *Poppins* was the lack of space to actually hang lights. The nursery and roof occupy the downstage third of the stage up to grid height. Other shows with this problem have rigged lights in the floor (e.g. *Sunset Boulevard.*) That can't be done on *Mary Poppins* because of weight limits and because the lights would be visible in certain set configurations. So no #1 bar, no backlight downstage, no backlight into the house.

But if there's no space what about sidelight? Want low cross light, but scenery needs to track on and off stage – arrange flying ladders...but this just means whenever you want the lights, they're either up in the air, or about to fly out. The end result is a lot of front-of-house lighting equipment on the show. Lower and upper circle fronts are full (and re-enforced!), side boxes are full and we have a double-stacked front-of-house truss and lights hidden in the show's false proscenium.

To add to our problems, Richard Eyre is a director who is hyper-noise-sensitive. Moving lights and scrollers all make noise, which is not an issue in rock-and-roll. But *Mary Poppins* is an old-fashioned musical with book scenes. The noise also extended to the scenic and automation departments. There is a lot of Rockwool in the showdeck.

The lighting equipment consists of conventional profile spots, all ETC Source Four, all beam angles including zooms (for matching window gobos to the set). PAR cans, L&E M16 battens as footlights, Rainbow colour scrollers, set with speed channels enabled for smooth, slow live changes, also set with fan speed control per scroller. These are patched with intensities so fans only run when the lamps are on.

The less-conventional equipment consists of LDDE Spectra-Connect four-colour DMXcontrolled fluorescent battens lighting the cyc, arranged in a 7 wide x 5 high grid. The problem we encountered was lack of depth – 15cm can make all the difference and would have given even coverage to cyc at 700mm. We got squeezed by size over-runs on all the other scenery elements and ended up with only 550mm throw. So in Bristol we got stripes. However, things improved for London. The LDDE units were incorporated into a bounce cloth.

The followspots are four front spots, two Lycian 2kW Xenon in the spot box and two more Lycians in side-circle positions – changed from Juliats for London because Xenon lamps give nicer skin tone rendering.

Other bits and pieces included DHA Digital Light Curtains, between cyc and bounce to tone top of cyc, Martin Atomic strobes for lightning effects and custom LED colour-changing fittings by Howard Eaton Lighting Limited in the portals and scenic pieces. Great fades from 0 to 10%, often a difficult area for LEDs.





Photo: Michael Le Poer Trench We use house dimming where possible – ETC Sensor in Bristol, Bytecraft in London with additional racks of Avo ART dimmers in Bristol; in London we actually removed some of the dimmers and replaced them with non-dim modules to power the moving lights. The main constraint for the overhead automated lighting was space. Filled with eighteen VL2000 spots and twenty VL2000 washes because bright, reliable, versatile – and compact! Ten VL2000S spots on advance truss are only used to dress the auditorium at end of show as Mary flies. To minimise noise, these lights are actually switched off until just before needed.

Four VL3000Q spotlights are rigged on the lower circle. Funny how we all get used to the size of these lights! Two Martin MAC2000 Performances on the upper circle were cut because they proved to be too noisy. Automated lighting on stage is by 16 VL5Bs rigged in and around the proscenium, the best moving light, no longer made. Why? Good colour mixing, compact, tungsten, reliable and silent.

Howard wanted a tungsten moving light, ideally shuttered to be able to shape it to the set. We looked at VL1000, which we had used before but which never quite felt bright enough. However, ETC had launched Revolution but didn't quite have the shuttering part – but they said they might just be able to get that to us on time. The Revolution was chosen because it promised silence, was brighter than the VL1000, had a built-in dimmer and was available from Stage Electrics, our chosen rental company.

The show uses 37 Revolutions with rotating gobo modules and shutter modules used

overhead, on the side ladders and front-ofhouse.

We beta-tested the lantern on the job. The Revolution was quite troublesome - particularly its shutters, which we and The Woman in White in London were the first to use. ETC were hugely supportive and had a technician on site. Problems were investigated and resolved speedily and new hardware and software supplied. Noise was dramatically reduced by changing the fan running speeds. These units are now on three big shows (Poppins, The Woman in White, Miss Saigon) plus many smaller ones in the UK. Clearly they offer something that lighting designers feel they can't get in any other unit. When we moved to London, they went into the theatre and they all just worked.

Additions for London included VL3500 launched just before Bristol – VL3000 with fewer rotating gobos but with shutters. A **fantastic** light! Four VL3500Qs were added to the upper circle, replacing long-cut MAC2000s, and we also replaced four VL2000 spots with VL3000Q spots on front bridge because they were quieter. We added four more VL3000Q spots on four new flying front-of-house bars.

Atmospherics consisted of two Unique haze machines with fans – TinyFogger smoke machines in the chimneys, Two Viper smoke machines in the wings plus Le Maitre low smoke machines – all controlled from the lighting desk.

Effects generally used radio controlled dimming on scenery, i.e. Avo wireless DMX onto trucks, then feeding dimmer racks built into trucks. We used HELL wireless dimmers on smaller items such as lamp posts. Some smoke machines were also radio controlled. The starcloth and comet effects came from HELL.

I have been using Strand controllers for ten years now, since *Blood Brothers* in 1995, *Les Misérables* around the world, *Miss Saigon*, *Oliver!*, *Oklahoma!*, *The Witches of Eastwick* and many, many more – the desks have served those shows very well. Why? They are great for theatre and for shows that have to be modified heavily during technicals, during long runs or for new productions.

The 520i is a powerful machine, with AutoMod, cue range editing, channel and playback partitioning facilities. On the *Miss Saigon* UK tour, one 520i replaced an Obsession, an Artisan, a DLC Macintosh and a PC. These controls are constantly improving, trustworthy and, of course, familiar.

But since things generally move on I thought I should look around, so I arranged a get-together of controllers including Compulite, Virtuoso, Hog 3 and grandMA. I wanted to look at Maxyzz, but Martin didn't seem keen to show it to theatre people. Funny how many of these console makers don't understand things that I consider invaluable – such as the ability to load a single cue back from disk.

When to make the leap? It's tough to change the tool that you know intimately and rely on utterly. You can't do it on a small show because there's no time. You can't do it on a big show when you are being well paid to be there and you don't want to be sitting there looking like an idiot. Howard Harrison had said that he didn't want anyone ever to be waiting for lighting - the control system has to be utterly reliable. Trust Strand to deliver that. Plus I know it well enough that when problems do occur elsewhere in the rig (e.g. bad DMX splitters) I can prove that it's not the console and troubleshoot the problem easily.

I'm looking forward to Vista – the next generation. This is conceptually brilliant – a completely different approach from any existing console. I'm still looking for the perfect console. I want to be able to get data in and out of the console to other applications - into FileMaker to make a focus plot database, for example.

Photo: Michael Le Poer Trench



So the final control system on *Mary Poppins* was two Strand 530i consoles, and during technical, we set up with two operators. We considered using partitioning - a moving light programmer and a conventional programmer but in the end it proved more powerful to have two programmers dealing with the entire system. We added new 'Live' mode to channel partitioning to help with this. This was particularly important when one has to focus Revolutions, which aren't the quickest lights in the world - though they've got faster.

Once initial plotting was done, we reverted back to one programmer and one Strand 510i as backup, eight universes of DMX distributed via Strand Shownet to two network nodes, then conventional DMX splitters. In London, we now use up to ten universes because we brought control of video and projection into the desk. In addition crews know the desk – which is an important consideration when you will be handing a show over.

Large format projection was used to provide multiple front cloths projection onto a front gauze to complete a picture – projected from front of house onto the gauze, then bleed through to real house behind. These are projected from PIGI 6kW projector with twin rotating film scrollers, controlled using PIGI's software and located in the followspot box at rear of upper circle. Yet another limitation on lighting rig – having to a leave gap on the rear auditorium lighting bar to let the projection through! The artwork was provided by Bob Crowley, realised by Wyatt Enever at DHA and Paul Highfield at E\T\C, who supplied the projectors. The images, printed at very high resolution (1200dpi), proved startlingly vivid.

#### Chapter Four – Getting the Show On

We commenced the load in at Bristol on 11 July 2004. The cast came on stage on 23 August, with the first preview on 15 September. The first night in Bristol was 28 September – and the show opened in London on 15 December.

Focusing lasted three days. There was no lighting session as such; we just had a session to play around with some ideas while the rest of the creative team was still in London. We roughed in some lighting over a dry tech while the automation and stage management teams programmed the scenery moves. We did most of the lighting in the tech - which is really a technical rehearsal combined with acting rehearsal combined with dance rehearsal combined with lighting rehearsal. How great it is to light with the people on stage. Once they've finished staging something, they never want to wait for anyone, so we have to keep up. The true advantage of moving lights is that we could react instantly as things change. We kept track of everything, as inevitably lights do get knocked, re-focused, re-rigged and moved. This kind of detailed, precise rehearsal is imperative for everyone and particularly for the safety of



the performers. I don't recall the stage ever having to wait for lighting.

# Chapter Five – a New Approach to Scheduling

As moving lights become more common, the design approach changes. A lighting plan is a statement of design intent – this Profile points here in that colour. However, a plan full of moving lights doesn't convey any intent, so if the LD wants anything roughed in, he or she has to communicate that intent. We don't yet have any standardised tools for doing this but we were fortunate enough to have enough time to make it up as we went along.

Practice until perfect. The technical rehearsal becomes the first pass through the show. This went on for about two weeks. The stagger through – running through the show (attempting not to stop) went on for about a week, stopping frequently at first, then less so. Then comes the orchestra runs - where you add the orchestra, and sound suddenly have to work hard. In Mary Poppins the orchestra has sixteen players, including two grand planos with builtin MIDI. Dress rehearsals and previews follow and as with all big shows there are problems big dramatic music movement when nothing much happening on stage as some effect hasn't worked such as Mary not flying into the audience for our first two previews.

The show sold out in Bristol and after opening we all went away for ten days, leaving the show to settle in, then back to make minor changes and other chores such as photocalls and video shoots.

### Chapter Six – the Big Move

The show ran in Bristol until 6 November 2004 then we had two weeks to get it out of Bristol

and into the Prince Edward Theatre in London – all thirty-something trailers worth. Preproduction work was well in advance – but a refurbishment of the Prince Edward Theatre was happening at the same time. This created a building-site nightmare. By some miracle it all came together in time for ten days of previews, then a glamorous first night on December 15.

The rig was revised a little for London but not hugely. There was very little time to get changes into the show. The over-run on building work and load-in taking longer than expected conspired to cut down the time scheduled for rehearsals. Focusing the rig took place between midnight and 5am.

Having got the show on we then still need to write it all down. This is for the benefit of the crew who have to maintain the show, and for creating any future productions. This discipline is just as important, perhaps more so, for moving lights. I use a custom-made database (Filemaker Pro) to track 'what is used where' for each show. For this show, I started a new type of database, called FocusTrack, which is not show specific and which can automatically extract information (when presets are used etc) from the console. Then we fill in the things the console can't know such as where the light lands on stage and what it is doing there. This leaves no room for argument when a light goes wrong or blocking is changed!

Historically, I entered information into a database and made drawings by hand, but today digital photography has changed all this. Since *Oklahoma!* I have been photographing each moving light in each preset focus, and each conventional light. A person in picture makes it easy to position light and see its direction and beam. FocusTrack can control





The lamplighters (below)

The ladders backcloth (above)

Mary on the landing



both console and camera directly to speed up photo shoot. Images are brought into the database (that includes still-useful written description), then all is written to CD.

With a £10 million advance by opening night in London and good reviews, what of the future? Well we expect to see productions around the world quite soon. But where are the dancing penguins? Some people will be disappointed if their favourite moment from the film isn't on stage but we're not replacing the film. You can still watch it (40th anniversary DVD, out now!) and with us, you can clap along. The magic of live theatre lives on!

Rob Halliday

## **MARY POPPINS**

Based on the book by P L Travers first published, 1934. Film 1964. Stage production 2004 by Cameron Mackintosh Ltd / Walt Disney Theatrical

Bristol Hippodrome & Prince Edward Theatre, London

Production period: July-December 2004

Original Music and Lyrics: Richard M Sherman and Robert B Sherman

**Book: Julian Fellowes** 

New Songs and Additional Music and Lyrics: George Stiles and Anthony Drewe

Co-Created by Cameron Mackintosh

Produced for Disney Theatrical Productions by Thomas Schumacher

Director: Richard Eyre

Co-Director & Choreographer: Matthew Bourne

Co-Choreographer: Stephen Mear

Scenic and Costume Design: Bob Crowley

Lighting Design: Howard Harrison

Sound Design: Andrew Bruce

Orchestrations: William David Brohn

Production and fit-up photographs by Rob Halliday