



AY PRIDE FESTIVAL, LONDON - SEE NEWS THIS MONTH

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## **SEASONAL VARIATIONS**

Lighting designer Howard Eaton describes a year in the life of London's Royal Opera House

A 'season' at the Royal Opera House extends from September through to mid-August, at which point the Grand Old Dame takes a well-earned three-week rest enjoying a brief retreat from the glare of life in the spotlight. The current season is now coming to its end - so where did it all start and what did the people behind the scenes have to do to get the magnificent show on the road?

Over a season, there can be in the region of 50 new productions and revivals being managed by the Royal Opera House. Each production has its own separate requirements which can change daily during the rehearsal period, with elements being added or taken out according to the

refinements being brought to bear by the designers, choreographers and producers. This season, in particular, is important to the Royal Opera House as it sees the introduction of a new leaner, meaner structure, designed for efficiency and improved team building. Four project teams have been established which are to remain together from season to season. Each has a team leader, deputy and crew, all of whom are being encouraged to multi-task.

The current season sees the production of eight new ballets, 12 ballet revivals, six new operas and no less than 17 opera revivals. Opera is often more complex to light than ballet, because it tends to be within a closed set - particularly the newer pieces. The sets tend to be large-scale and heavy and present a challenge to get any light in at all! Ballet requires open space in which the dancers can move, and naturally this is far easier for the lighting designers to work with.

Generally, an opera will run for two to three weeks and will have six to eight performances over the period. Of course, performances do not run consecutively in order to preserve highly-trained voices. The mobility of the sets is therefore a prerequisite which adds a dimension peculiar to the Royal Opera House. The technical staff not only have to strike the set every night and assemble a new set for the following day, but they also have to build the entire set in eight feet sections - because that's how big the door is and how wide the lift shaft is! The ROH was not built to take the fabulous sets designed by



The banquet table, constructed in striking perspective, from Sleeping Beauty.

contemporary set designers and now expected by modern audiences. More to the point, it was built, for the most part, without accessible storage space. The fact that it continues to deliver the most spectacular stage sets in the world is, in my opinion, nothing short of a miracle!

It will come as no surprise that the production and technical departments are operational 24 hours a day. Overnight, the crew strikes that night's set and puts up the scenery for either the following night's performance or for a morning rehearsal. This happens six days a week, with Sundays often reserved for technical work.

The production managers will normally have the stage designs a year in advance of a show and will be planning, experimenting and prototyping for months before the season begins. However, things are rarely 'normal'. In the case of the current season, which features two of the most complex stage sets that the ROH has ever had to execute, the production department received the drawings for one of the shows, Sleeping Beauty, just four months before the show was to open. A combination of two factors made things difficult: size and movement. In brief, huge pieces of scenery have to move in full view of the audience, which requires an unusual amount of co-ordination of scenic and lighting effects.

The entrance of Carabosse (the wicked witch) was to be dramatic, with the scene opening to show a giant, fully-laid banqueting table. The table, its contents and the chairs

surrounding it shake and vibrate preceding the unexpected arrival of Carabosse, who emerges from under the table in a Victorian bath chair, accompanied by streaks of lightning, flickering candelabra and the sound of rumbling thunder. To achieve this, the table and its settings were built in perspective, with the table settings loosely attached with velcro. Each chair was motorised - the movement produced by a mechanism built by Paul Saunders.

Once the movement was perfected on the first chair, and approved by set designer Maria Bjornson, the other chairs were then built. The three suspended

candelabra, carrying some 20 flicker candles in each, were also built in perspective, as were the four standing on the table. The overall effect was truly extraordinary. As it turned out, the hardest part of all was the assembling and dismantling of the set on a day-to-day basis.

Another key part of the set are the six columns which are used to powerful effect to illustrate the inaccessibility of the palace when everyone falls asleep. The central columns move further in towards the middle of the stage, the palace gates close across them and the front two columns tilt inwards while creepers grow around them to show the passage of time. The six column structures, each 36ft high, were built by Cardiff Theatrical Services and were carved and moulded in fibre-glass by Stephen Pyle. The columns were mounted on large structures measuring 36ft x 20ft, which would subsequently carry the hydraulics. These structures were later to be positioned on each side of the stage, operating the columns. Despite teething problems at the rehearsal, the whole set worked perfectly.

A further feature of the design is the boat which moves around the stage by remote control. The mechanism engineering was designed by Mike Barnett, one of the world's foremost theatrical design engineers (his credits include the helicopter in *Miss Saigon* and the moving bridge in *Starlight Express*).

On to more dramatic things: for the 'Awakening' scene, Maria provided a 1:25



The hydraulic platform on Billy Budd - focus of the main scenic changes.



The La Traviata set, with its four-metre glass fibre and steel lampshade.

scale model of a gigantic spider's web which was to cover the entire set. The brief was to make it dissolve in view of the audience as the Prince awakens Sleeping Beauty with a kiss. This presented two problems: it had never been done before and the 'dissolved' spider's web had to be reassembled for each subsequent performance!

David Pritchard, the production manager working on *Sleeping Beauty*, decided that, on this occasion, outside help would be needed to complement the in-house facilities. He contacted Peter Everett of Ken Creasey Limited who specialises in the production and use of scenic drapes. Creasey produced a 10ft square prototype from the artwork supplied by Maria and then, after a couple of development stages, produced the full scale 60ft x 36ft version using cloth, netting, gauze and velcro. The structure was then sent off to a painter to reproduce the web effect on fabric.

At this stage, no guarantee existed that the full scale web would work: something almost 30 times the size won't necessarily respond in the same way as a 10ft prototype. Just one day before the first performance, staged in front of Bill and Hillary Clinton in Washington, the crew were able to test the full-scale version and, to the relief of all, the web dissolved to plan.

The opera *Billy Budd*, another spectacular of the season, presented very different problems. Most stemmed from the set, built around a large hydraulic platform which, when down, is a deck and, when up, is a ship's mess, featuring a whole network of traps, hatches, stairs and ladders. The production had been staged in Geneva in 1994 and had subsequently been invited to Covent Garden; however, in the Geneva theatre, productions do not run in repertoire, so there were no eight feet doors to deal with! In addition, the Geneva stage floor had numerous holes drilled in to it to facilitate lifting the platform - something that could not be countenanced at the Royal Opera House.

None of these factors deterred the production team which, led by Geoff Wheel and overseen by David Pritchard, had not had the opportunity of seeing the show, undertaken the usual technical recce, or received a video of the production - instead they worked from a photo and a drawing! The technical team, after discussions with Mike Barnett, gave the project the go-ahead, despite the fact that they would only have one hour in which to strike each set.

Mike Barnett produced the engineering drawings and design for Smith and Forbes Engineering who built the steelwork for lifting the platform and installed the hydraulics. When completed, the whole structure went to Cardiff Theatrical Services to have the wooden cladding and painting added.

Again, the tricky part was designing the floor so that it could be broken up and assembled quickly. However, the benefit of the jigsaw approach was that the set could be used in the opera rehearsal room which allowed the artistes to familiarise themselves with the more complex movements.

Understandably, set production is one of the critical factors in the process. The general rule is that, if time permits, any painting, wooden scenery or props will be produced in-house, while anything with steel in it is usually subbed out. Special lighting effects will go out to a contractor. However, new suppliers will be given the chance to tender on smaller projects, while larger, more complicated projects will go to the people or companies with a proven track record - trust is a key factor. From a supplier's perspective, this open-shop inevitably keeps

them all on their toes, and working with the Opera House is very much a team effort.

Another unusual design of note this season includes the biggest lampshade in the world for *La Traviata*. This effect, which is four metres in diameter, had to fly in for a very quick scene change. Set designer, Bob Crowley, knowing it to be a complex effect, worked closely with David Pritchard to ensure the right effect would be achieved. Steven Pyle Workshop made the shell out of fibre-glass and steel, while ordinary Parcans were installed by the lighting department.

Finally, there came Wagner's Ring Cycle, comprising four separate operas: *Rheingold*, *Walkure, Siegfried* and *Gotterdammerung*. It is one for which my own company, Howard Eaton Lighting Limited, supplied the illuminated stars and custom-made discharge lights and dowsers for the opening opera, *Rheingold. Siegfried* features a collapsing oven which bursts into flames, and for this, Any Effects was drafted in - a company with many years' experience producing burning and fire effects for popular television dramas such as *London's Burning* and *Bugs*.

It would be impossible to cover everything, but I have endeavoured to give a view of the most spectacular and offer a glimpse at the variety during a season. And now I must retire; the productions continue, and I am looking to design a huge Catherine Wheel for a production of *Carmina Burana* at the Birmingham Royal Ballet, but that is for next season and has no place here...

Howard Eaton is the managing director of Howard Eaton Lighting Limited (HELL), a specialist in the design and supply of special effects for the theatre lighting industry.

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