

CELCO SERIES 2

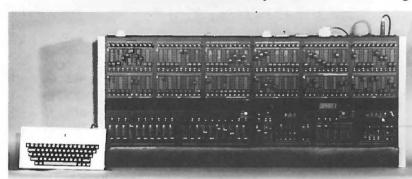
The World's most advanced two-preset memory boards

Real-level memory storage, direct from presets at touch of a button.

Illuminated preview of memories showing levels, enabling "blind modification".

800-step multi-direction chaser, with full delete and insert facilities. Chaser will sequence channels or memory cues.

Full alpha-numeric readout of cue description, and autofade time. Visual preview of chase pattern prior to output.



Magnetic tape data storage and playback facilities for entire show.

Temporary playback master allowing hold and mixdown of stored cues.

Optional timed autofades on every memory cue from 1 second to 6 minutes. Cues can be stepped by single button.

Full linking facility between 30, 60 and 90 channel boards. Outlet port for computer V.D.U. Effects controller input port.

THEATRE - TOURING SHOWS - AUDIO VISUAL - TELEVISION This is the board that lighting designers have been asking for.

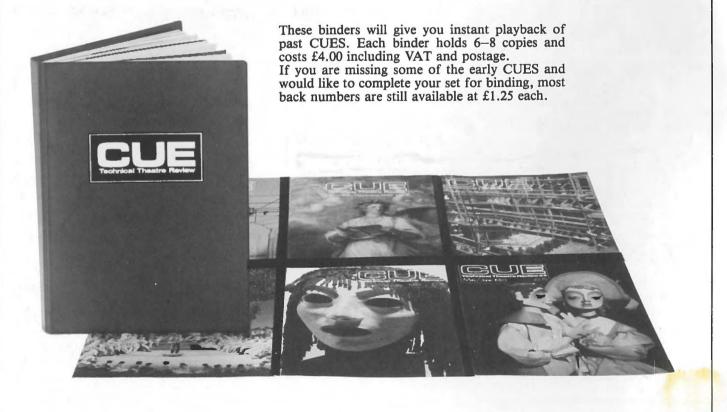
CELCO SERIES 2 TOMORROW'S TECHNOLOGY TODAY

CEREBRUM

U.S. Sales – Celco Inc. 262a Eastern Parkway, Farmingdale, NY 11735, U.S.A. Tel: (516) 249-3662

Worldwide distributors: **Cerebrum Lighting (Sales and Hire) Ltd.,** The Stage and Effects Lighting Centre, 168 Chiltern Drive, Surbiton, Surrey KT5 8LS, England.

Tel: 01-390 0051 Telex: 892337 (CELCO G)



Cover: One of Bridget Riley's settings for the Ballet Rambert's *Colour Moves*. What David Fingleton on another page describes as a feast for the eye, demonstrating what carefully considered, stylish simplicity can achieve in stage design. Choreography by Robert North and costumes by Andrew Storer. Lighting by John B. Read.

CONTENTS

Lighting Must Respond to the Design Robert Bryan	4
Experimental Prototype Community of Tomorrow Francis Reid	
	6
Stage Design David Fingleton	9
Books	12
Letters to the Editor	14
Shopping at USITT Francis Reid	15
Three Home, One Away and One to Come D. C. Irving	16
The Wooden O	100
Stephan Chambers	20
Mantua: Teatro Scientifico Francis Reid	24

Cue is an independent magazine published bi-monthly by Twynam Publishing Ltd.

Available on subscription UK £10.50 per annum (6 issues) Europe and Overseas £13.00

Editorial Board

James Twynam (Managing)

Francis Reid

Jeremy Twynam

Jasbir Singh Bassi (Art)

Editorial,
Advertising and Subscription Office:
Twynam Publishing Ltd.,
Kitemore, Faringdon, Oxfordshire SN7 8HR
Telephone 0367 21141



STROKING THE TIMING

AT THE TOUCH OF A BUTTON has had a long run as the standard cliche for expressing operational simplicity in an electronic age.

KEY STROKING seems to be the favoured replacement at a time when micro-technology is making control surfaces so sensitive that they will soon be able to respond not just to the difference between an admiring glance and a dirty look but to the entire emotional gamut in between.

Whether button touchers, strokers of keys, wavers of light pens—or merely carriers of luggage towards airport doors—we are all beneficiaries of developments in control technology that have almost overtaken the wilder fantasies of the science-fiction dreamers.

Has the coin a reverse? Well, it is a fine point of ethical argument as to whether a heat-seeking missile is any more evil than one released "at the pull of a trigger".

But surely the loss of physical involvement is to be regretted? Or will that not matter to generations who have never known the pleasure of pulling a dimmer lever as if it were drawing a pint of ale, of wheeling a grandmaster with the swell of the orchestra, or even just experiencing the finely detailed muscular pressures involved in handling quadrant master-faders during a gauze dissolve?

Meanwhile we welcome the word STROKING which implies that the timing is rather more under operator control than when a mere touching initiates the recall of a programmed action.

Lighting Must Respond to the Design

ROBERT BRYAN

It is not enough to put huge amounts of lighting in the air - there has to be belief and a total commitment to the theatrical ideas of the show.

It must be some 25 years since lighting design began to have an impact in the U.K. Thanks to the immeasurable work by such pioneers as Joe Davies and Richard Pilbrow our work has slowly emerged as a profession. "Hersey is one of a handful of lighting designers - among them Nick Chelton, Robert Ornbo and Robert Bryan - who transformed the art of lighting design in this country to the point where it far exceeds in beauty, drama and sophistication anything I saw in Paris " This critical acclaim appeared in the OBSERVER some weeks ago. I quote it here, not necessarily to have my name in print, (although this kind of notice is more than satisfying!) but to give some indication that our profession has finally achieved recognition beyond the 'beautifully', 'badly', 'well' lit phrases normally reserved for us.

What pleased me most about the above quote is the good it did the profession - we all benefited. We may well ask ourselves why has it taken a quarter of a century for lighting to have earned this kind of recognition. As in all things "new" the great British public are very reluctant to accept change. I think it true to say that the first ten years were up to persuading the theatre fraternity that lighting design was necessary, and the last fifteen years persuading the punters that we existed. This long period of gestation has however borne fruit. There is a solid nucleus of lighting designers in this country, there is complete confidence in us from all the major subsidised companies and repertory companies, even the West End managements — with great reluctance — seldom, if ever, put on a show without a lighting designer. One is therefore prompted to ask, is there a single element which has fused (!) us all together over the years? I would like to submit that there is, and falls into just one "COMMITMENT"

The germ of the idea for this article arose out of a supper discussion, some time ago, I was having with director Peter Wood and designer Carl Toms. We were in the middle of a production period of a play in Vienna, and as in all those situations, clinging together on a raft of food, wine, and talk. We were going through that inevitable "difficult" time of a show and our thoughts were very much on our commitment to, a)

the play and the actors therein, and b) our conception of how the play should be resolved. This word "commitment" kept cropping up in the conversation and indeed became the central theme. On reflection I am convinced that the slow progress of the lighting profession has a solid foundation on its members having a) a commitment to lighting design as an entity and b) a commitment to each and every show we are involved in. I almost believe the latter is the most important thing we have to consider. It is not enough to put huge amounts of lighting equipment in the air and expect a show to get lit. There has to be belief and, dare I repeat myself, a total commitment to the theatrical ideas of the show.

This philosophy often manifests itself in successful teams or partnerships. For example the Director/Designer partnerships of Michael Blakemore and Michael Annals, Peter Wood and Carl Toms, Sir Peter Hall and John Bury, Trevor Nunn and John Napier. In all these partnerships there is always a complete belief in the work in question and the aesthetic and visual manner in which the work is to be presented. Occasionally a lighting designer joins the team, for example myself with Blakemore and Annals, Wood and Toms, and David

Hersey with Nunn and Napier. Mutual respect and confidence built up in this sort of teamwork is at the same time immensely satisfying and immensely exciting. Again, "commitment" is so closely linked with communication. Too often in the past, the lighting designer was brought in at the last minute when the set had been designed and all inherent problems had to be solved at the "tag end" as it were. However with closer communication many of the problems would not have arisen in the first place. There is no doubt that this situation has become rarer in the recent past. Undoubtedly this has been made possible by earlier lighting designers' commitments to make the shows work however difficult the problems.

This attitude of mind of course influences he way one works and approaches a piece albeit Drama, Dance, or Music theatre. One or two "case histories" may help to illustrate the point.

One of my earliest collaborations was on the play A Long Days Journey Into Night, directed by M. Blakemore and designed by M. Annals, for the National Theatre. There were several remarkable features about this production. One was the wonderful ensemble playing that Blakemore got from



The recent R.S.C. production of Henry V. Directed by Adrian Noble, designed by Bob Crowley and lit by Robert Bryan. (Photo: Joe Cocks Studio)

his cast, almost to the extent of the audience being embarrassed "voyeurs" on a family situation. One other remarkable feature was the extraordinarily beautiful set designed by Annals. He managed to create on stage the most convincing living/dining room for a family I have probably ever seen. Complete with verandah, windows, a wrap round cyclorama he created a completely realistic illusion. The latter may sound a contradiction in terms but nevertheless it is true. My brief was deceptively simple. We needed to create, Sunny Daytime, Night-time, and a Foggy late afternoon. However with three walls, an overhead ceiling, and little depth up to the cyc. life was not easy. After several talks with the two Michaels, we came to the general idea of how we wanted to see the piece. 5K's for the sunlight through windows, no "blue" night-time but VERY directional source illumination for practicals, and very careful use of gauzes for the foggy afternoon. I then worked out with plan and section the best focus use of the basic N.T. rig and most importantly where we would rig special units tucked inside ceilings and between gauzes. There was absolutely no question of altering the design to accommodate existing lighting positions, it was too good. In this case one's belief in the design was such that one simply had to make what lighting positions there were work. The nett result of this were totally believable situations both within the context of the play and design. One other persons input to this production was of tremendous help. Sir Lawrence Olivier's impeccably keen eye and theatrecraft were very helpful to me - indeed his colour suggestions for "foggy day" the were immensely perceptive.

In direct contrast to the total realism of Long Days Journey Into Night is a very recent venture, namely Comedy of Errors for the 1983/84 Stratford and Barbican

seasons for the Royal Shakespeare Company. This production directed by Adrian Noble and design by David Ultz uses a relatively abstract design. The set is basically a curved "sound studio" wall into which a flying cradle enters and leaves, and with a specially designed orchestra pit downstage. This design concept was arrived at after a lot of discussion about the mechanics and meaning of the play. In our terms, Shakespeare makes direct reference to a Music - Hall - Knockabout kind of world. Two key elements of this design are to do with costume and particularly make-up. The brilliant solution here was to employ the techniques of Music Hall and Circus. It thus gave the audience recognisably two sets of identical twins, and a townspeople gone "slightly mad". This far from traditional viewpoint of the play relies very heavily on how the play is lit. A standing set of this nature does need careful treatment. After much discussion with Noble and Ultz, we came up with the solution of using unusual angles to light the play, for specific moments, and to rely on Music Hall techniques for the musical numbers etc. Again the commitment to this design had to be complete, or no show!

For a good number of years now I have been heavily involved with lighting for Opera. Techniques for lighting Opera are, I feel very similar to those for lighting Drama. The differences occur largely in consideration of the scale of production and the relation between singer and conductor. It is often possible to be more adventurous with music shows than with straight drama. Design styles can often be quite outrageous fitting in with the style of the music (or not in some cases!) and thus liberating the more conventional way of lighting.

One of my most interesting tasks in lighting Opera was the David Hockney Rakes Progress, directed by John Cox, for the Glyndebourne Festival Opera. I was dauntingly aware that Hockney is arguably the greatest living painter, certainly one of the best known. Prior to meeting David I was dreadfully nervous. His now famous Hogarthian designs were terribly demanding. To be both true to him and to the singers (in cross-hatched costumes) I thought it vital to use only white light. Dare I add colour to a Hockney! It became obvious during the first lighting session that white light alone would not work. What to do! Fortunately Hockney being the man he is quickly resolved the problem once the colour book came out. Indeed on subsequent revivals and having got to know David well, we were able to go quite outrageous on some choices of colour.

To two failures; Tannhauser for the Nederlands Opera and Esclarmonde for the Royal Opera Covent Garden. Both of these help to illustrate and confirm my earlier ideas of commitment and communication. Tannhauser designed by Stefan Lazarides and directed by John Cox proved to be a nightmare. All three of us were frantically busy that season and never really communicated our ideas for this production. Cox and Lazarides found the design solution most difficult to resolve. To my eternal regret I never sat in on any of the early discussions. In the event we had a wholly white box comprised of white projection screen walls, (3) and a white carpeted floor. Moveable ramps occupied various positions within the box. At possibly any other time and almost certainly another show it would have been a very exciting space to light. As it was with screens effectively 8M square, with less than 2M depth and little in the way of slide design the inevitable clash occurred. I really had a paucity of ideas and last minute inspiration (often a life-saver) never came. The eventual elimination of the white carpet, at the maestros insistence, and its replacement with a black lino ballet floor brought me to my knees. Any commitment to the show had flown.

Esclarmonde a little performed Massanet opera, (and now I know why!) was an existing design and production brought to the R.O.H. from San Francisco Opera. Directed by a most charming man Lotfi Mansouri, and designed by Beni Montresor, they came to the Opera House complete with their American Package. Once again I have to admit to a less than enthusiastic response to the design, - no commitment. A tortuous production period led to a less than satisfactory result on stage.

It was perhaps the lessons from these two productions and that conversation with Wood and Toms that crystallised these current ideas. Ones that I hasten to add have always been there I suspect but have lain

dormant for a good time.

On the happy side of the coin was the recent production of Henry Vth. for the R.S.C., which resulted in that OBSERVER notice. Directed by Adrian Noble, and designed by Bob Crowley, it was a production of total commitment, total communication, resulting in one of the most rewarding experiences of my career.



The Comedy of Errors directed by Adrian Noble, designed by David Ultz at the Royal Shakespeare Theatre, Stratford. Lighting design: Robert Bryan (Photo: R.S.C. Stratford)

Experimental Prototype Community of Tomorrow

Francis Reid visits EPCOT CENTRE (Walt Disney World, Orlando, Florida, USA)

Arrive at least an hour and a quarter before the park's official opening and wait at the gate until the turnstiles are unlocked suggested the official guide book. That seemed too much like taking pleasure seriously, so I rolled up three hours after opening and limped out at closing time, some eight hours later. I did not do a head count but I guess that fellow visitors numbered between 20,000 and 30,000 designated on the official comfort scale respectively as (semi-private) and (longer lines but still comfortable). The scale runs from 15,000 (exclusive) through to 50,000 (highly active) to 70,000 and up (body to body)

Opened barely two years ago, Epcot has expanded Walt Disney World into a 28,000 acre resort, hidden amongst the rolling greenery of central Florida's year-round sunshine. As doyen of the Disney dynasty, Michael Mouse must be the supreme megastar of the entertainment industry. However there are no cartoon characters walking the streets of Epcot, although their Magic Kingdom is but a short monorail ride away. Mice, ducks, crickets, dalmatians and yogi bears sure have a visa problem.

The basis of Epcot is that old hat of fairground technology, the Ghost Train. To experience the wonders of each pavilion, the audience travel in carriages or boats which take them on an audio-visual journey through that pavilion's theme. It is all highly theatrical, yet a curious inversion of the normal staging process where the audience is static and the time element provided by the progress of the dramatic action. In an Epcot journey it is the audience who provide the time progression as they move past a series of tableaux. These tableaux are not completely static. Each contains a short cycle of movement which barely repeats within the time that an audience block is processed past it.

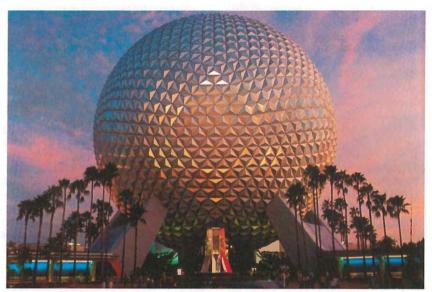
The new technology that transforms the old ghost train is Audio-Animatronics. The actors are hyper-realistic props who gesture and move their mouths and face muscles with an accuracy of synchronisation to the recorded sound that is uncannily credible. It is only lack of projected 'truth' and sensuality that differentiates them from live actors. An audio-animatronic acts with a logic that is free from the illogical warts that

characterise real people.

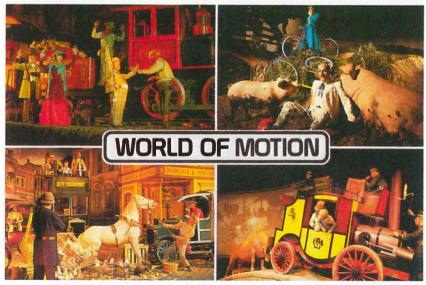
The technique of packaging people through a theme pavilion is not just a production device to control their audio-visual experience. It is also a method of processing people through these experiences in an orderly fashion. The logistics of Epcot would be badly thrown if audience

individuals could choose to linger over a tableau that particularly interested them. Progress through an Epcot experience is inexorably controlled. The ghost train is a significant management tool.

However it is only in relation to performances that one is aware of being managed. Once you have paid your entry (a bargain 17 dollars per day, various discounted deals for longer combinations of Epcot and Magic World) you are free to wander. And everything is free - all the thematic experiences, the boats that cross the lake and ye olde omnibuses that circle it. The only financial extra is food and there is a wide choice from international ethnics to burgers. Unlike



Spaceship Earth dominates Epcot and the surrounding countryside. 164 ft in diameter, encompassing 2, 200,000 cubic ft of space, it stands 180 ft high on six legs supported by pylons sunk 100 ft into the ground. The covering is 954 triangular pieces of a quarter-inch sandwich of twin anodized aluminium faces with a polyethylene core. Inside this giant golfball, trainloads of visitors travel through the world's history told in terms of the development of communication media



In the World of Motion pavilion, a series of audio-animatronic tableaux tell the story of transport from foot-man to space-man.

teetotal Magic World (where they proudly boast that even the pina coladas are alcohol free) there are non-coke drinking options in Epcot. But you do need a little investigative persistence.

With the entry ticket comes a slender guide book including plan. I slipped it in my pocket and set off to wander, letting my path be determined only by my response to the architectural beckoning of the attractions ahead. And when I took my pictures, I did not use the Kodak "Photo-Spot" symbols indicating photo-taking locations.

Where to begin? Architecturally there is no alternative. One just has to start an Epcot journey with **Space Ship Earth**. This great golf ball (164 feet in diameter) dominates the skyline, its multifaceted surface responding symphonically to the light, natural or artificial, that falls upon it. What can be inside? Curiosity is not merely aroused; investigation is positively commanded.

So join the line of people being processed through one of Epcot's specialities — crowd control by a complex maze of steel barriers whose flexible format allows short circuits to be introduced in response to the state of the business. (Any American view of the

future is sure to include sophisticated queueing procedures since they have raised the practice of standing in line to an art which is the outward and visible sign of democracy.)

Into the snaking vehicles where voices warn about keeping our arms inside as the doors glide shut and we start to spiral upwards through the moments of history layered within the structure of the giant geosphere. This is history viewed through the development of communications. We emerge from a musty black tunnel with shooting stars and thunderbolts into cave men drawing, Egyptian temple hieroglyphics, the Phoenician trader's 22 character alphabet, Roman roads, the Greek theatre (they are playing Sophocles 'Oedipus Rex' as we pass), Benedictine monks illuminating manuscripts, Gutenburg printing, the Italian renaissance, steam-press printing, radio, film, television and onwards into the information age. The grand finale of this ride through communication history is arrival at the very top of the sphere where the vast inky dome, acting as the ultimate in cycloramas, not merely evokes the infinite but, in a rare brief moment of Epcot truth,

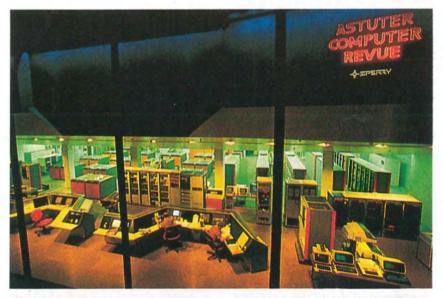
becomes it.

At the base of the Spaceship Earth sphere is Communicore with sections on all aspects of Information Technology. I attended a session of Electronic Forum in the Future Choice Theatre where the audience is invited to vote on questions raised in a current affairs A/V presentation. Voting is by 'key-stroking' the electronics in the armrests of the theatre seats. My group were hardly representative of a caring society and the favoured options were distinctly monetarist, although the only proposition to attract absolutely nil votes was a count of those prepared to give their tax refunds to charity. By chance, I left the Epcot Computer Central until the very end of the day when it turned out to be the climax, or anti-climax of my day.

On to the World of Motion for another time travel through historic episodes. This journey presents scenes from the development of travel itself. And does it in a light hearted way that is rather welcome among the inevitable pomposity that accompanies many of Epcot's portentious statements about the nature of our future. Basic transportation is walking and so the history of travel starts with footsore man seeking to relieve his pedestrian pains. Alternatives such as the magic carpet remain dreams. We need the wheel - the circular wheel which we see develop from its discarded triangular, rectangular and polygonal predecessors. From then, man is on the move and with each new energy source transportation becomes increasingly sophisticated. We tour most of the big moments, many of them presented in a way that provides a smile - particularly an early traffic jam and the flapper motorists of the 1920s. Audio visual technology is used to produce a sensation of speed and the ride ends with predictions of future travel which provide no response of wonderment in a generation to whom the space age is yesterday's decade.

For the most futuristic predictions, take the journey called Horizons. It starts with a Looking Back at Tomorrow sequence including Jules Verne and clips from old sci-fi movies. Least fanciful is probably the holographic telephone. For this, as for midpacific floating cities or colonisations of space, we have the technology almost within our grasp but have we the collective will to harness the required resources? Horizons touches on this when travellers are invited to choose, by an electronic polling device, which optional sequence will conclude their journey. I enjoyed the sensation and applaud the technology of my almost unbelievable flight above the skyscrapers, but this glimpse of the future did not induce any regret that I will not live into such an age.

So I took the **Journey into Imagination**. But embarked without reading the invitation to join your host, Dreamfinder, and his impish companion, Figment, on an imaginative romp through the creative process. This was cartoon whimsy at its most coy. To claim that it displays how all literature, drama, music, art and inventions come from "one little splash" — the magic quality of imagination that dwells inside



The ultimate prompt corner. Every technical and audio-animatronic actor cue throughout Epcot originates from the central computer room, which itself forms the stage setting for a presentation by projected actors.



A corner that is for ever England.

each of us is a claim of such immense pomposity that it is only acceptable within the context of the glorious old theatrical hokum that is the very soul of Epcot. However there was fun to be had in the Image Works where the visitor can manipulate the supplied visual and aural images. I had most fun with the sounds, whether leaping about on the hexagonal light patterns on the musical carpet at Stepping Tones to make my own mix of drums, fiddles, choir and harp glissandi; or conducting the Electronic Philharmonic, balancing the instrumental sections by waving my hands over light sensors. The Image Works is devoted to creating an illusion of creativity. The Journey into the Imagination pavilion also has a 70mm 3-D movie which quite simply sets new standards which seem to take the craft, if not quite the art of projected moving images close to their four dimensional limit. To view such a film it is necessary to wear polarising eyeglasses, but no such personal visual aids are required for the World Showcase section of Epcot. Its designers have viewed our world through strongly rose-tinted spectacles, concentrating upon the more romantic images of our international heritage. Whereas Future World looks forward, World Showcase looks to the past. After all, does a vacationeer want reminders of the warts of the present?

World Showcase comprises national pavilions around the perimeter of the lagoon — an expanse of navigable water that would equal 85 football fields if it were not so irregularly landscaped. There are nine countries and more under construction: presumably the fullness of time will bring a

complete world.

As the host nation, the United States occupies the central position directly across the lake from the Future World. The colonial style building that houses the theatre for The American Adventure Show is faced with 110,000 hand made bricks of soft pinkish-orange Georgia clay. This show is presented by Coca-Cola and American Express, so no expense has been spared. For half-an-hour, scenes appear from the wings and from below - especially from below where ten sets are shifted around on a 65 by 35 by 14 feet wagon substage weighing 175 tons - backed by a 72 feet wide cyclorama. Described as a hundred yard dash capturing the spirit of the country at specific moments in time we are taken through from the Pilgrim Fathers' landing until the Golden Dream Finale when the box curtains rise to reveal a dozen life-size sculpted 'Spirits of America'. There is a cast of 35 audio animatronic recreations of such American heroes as Mark Twain, George Washington, Alexander Graham Bell, Andrew Carnegie, Marilyn Monroe, John F. Kennedy, Martin Luther King, Charles Lindbergh and Lucille Ball. Elvis wriggles his pelvis and Benjamin Franklyn walks upstairs - the ultimate in electronic acting technology. Their performances bring a new meaning to the phrase 'heightened reality'. Now we know what nineteenth century acting was like. The only national pavilion with a ride is Mexico where you

can sail the river of time in El Rio de Tempo, a boat trip through vignettes of centuries of Mexican life. Some countries have film shows, the Canadians and Chinese using all embracing 360 degree 'circle vision' — no seats in these theatres, just 'leaners' to stabilise your rubbernecking body.

Italy and the United Kingdom offer street theatre by the Teatro di Bologna and the Renaissance Street Players respectively. Their performances, based on audience participation, producing bellowing laughter from the onlookers, have little to do with the theatre traditions of either these or any other countries - the roots of these entertainments are the television game shows where people volunteer as laugh fodder. I was not lucky enough to catch an appearance by the exuberant Pearly Band whose members wear traditional clothing encrusted with white buttons. But I marched behind the scarlet clad fifes and drums, feeling every inch a member of the U.S. Cavalry come to relieve.

A few titles will give the feeling of the shopping: Artesanias Mexicanas, Volkskunst, La Gamma Elegante, Galerie des Halles, The Tea Caddy, The Queen's Table and His Lordship. Or eating in the Biergarten, Au Petit Cafe or the Rose & Crown Pub & Dining Room.

What can one say about the architecture? The selected images are a pure distillation of everyone's expectation of a country before they go there. The buildings are very well researched but, in adapting scale and proportion, famous buildings become meaningless. But the juxtapositions can be entertaining if you know the country. Consequently I found that the countries that I had never visited were by far the most believable ones.

But as dusk falls, all the buildings yesterday's and tomorrows - become more fantastical, especially against a clear clean cycloramatic Florida sky. As already indicated, I finished my day by visiting Astuter Computer Revue in whose theatre a massive curtain rises to reveal that the set is Epcot's huge computer room. (Well, huge in a microchip age.) A little projected person leaps about and gives the staggering information that all the Epcot shows are controlled from here. Automatically, Only ushers are needed to run the shows - and mainly for emergency. All the actors and environments are stage managed by the programmes locked up in this Cathedral of Information Technology. This was a moment of Revelation. Hallelujah. I was an illogical human in the midst of all this logical decision and I rejoiced.

Epcot's world is cosy. It is spotless. Is the future really going to be quite so sanitised? At the peak of the communication extravaganza in Spaceship Earth, languages intertwine and superimpose into an electronic tower of babel. Why do the nations so furiously rage together? No answer is offered. For the question is not posed. In Epcot's world, the visitor is on vacation from the world's problems — past, present and future.

PENSION SCHEME FOR ADMINISTRATION AND TECHNICAL STAFF IN THE ARTS

A great deal of interest in and discussion about the provision of pension arrangements has been generated in recent months largely as a result of the government's current enquiry.

This current debate presents an opportunity to draw attention to the Pension Scheme for Administration and Technical Staff in the Arts which was set up some nine years ago and continues to provide comprehensive retirement and death benefits for members.

The scheme, which is promoted by the Arts Council of Great Britain, has a good record of providing protection against inflation both for pensions in payment and preserved pensions and there have been recent improvements in life assurance benefits. Most recently, following a detailed review, there have been changes in investment policy with the intention of improving the yield on the scheme's investments.

At present some 50 arts organisations participate in the scheme but the Trustees consider that many more organisations should be considering urgently the benefits that membership could bring.

Employing organisations in the arts and entertainment industry who do not already provide a scheme of their own and who wish to consider including their eligible employees in the Pension Scheme for Administration and Technical Staff in the Arts, should contact Ken Belcher at MPA Limited at Metropolitan House, Northgate, Chichester, West Sussex PO19 1BE (telephone 0243 –785151).

STAGE DESIGN

DAVID FINGLETON

Starlight Express is a designers success. More design genius at work in Sadlers Wells and some skilful up-dating of opera in Geneva

At a time when Arts Council cutbacks are causing massive economies, even in some cases the threat of extinction, in many of our opera and drama companies, the expenditure of no less than £2 million on just one West End show hardly seems the most tactful or desirable thing to do. At least it may be said that all the money is private and that the backers who produced it are prepared to risk losing it. That they will not lose their money is almost entirely due to the quality of Starlight Express's (for that, of course, is the name of the show) design - to the way that most of the £2 million has been spent. Indeed the originator of Starlight Express, Andrew Lloyd Webber, should be thanking his lucky stars for the skill and creative imagination of John Napier and David Hersey. For without their bravura work on design and lighting Lloyd Webber's gravy train, with its minimal plot, vapid, totally forgettable lyrics, and highly derivative, wholly unmemorable music would very probably have ground to a halt some time ago. As it is the show's sheer spectacle should keep audiences, and thus Mr Lloyd Webber and his £2 million worth of backers, happy for some years to come. One could hardly say that the money had been wasted. The Apollo Victoria is a hideous aircraft hangar of a theatre, but its auditorium, if not, alas, its repellent foyer, has been virtually rebuilt to accommodate Starlight Express. A roller skating track now surrounds the stalls, with a smaller track closely encircling the front stalls and, at the touch of a button, rising several feet above them. Another track goes round the circles and the stage itself has been converted into a steeply banked roller piste which is dominated at the rear by a huge, hydraulically powered swing bridge which, again at the touch of a button, can change the level or direction of the action. Additionally there is a series of narrow perspex tunnels which also encircle the auditorium. These contain silent model trains, with glowing carriage windows, which glide around the audience before the show and during the interval. The stage concept is a stunning realisation of every childhood dream about model railways and Meccano sets. Current theatrical high-tech has been used to the fullest and one can but admire the virtuosity.

The triumph does not stop with Napier's inspired set. His costumes are at a similar level, using a brilliant blend of medieval tournament armour, modern rollerball kit, and the padded outfits of American footballers to achieve a remarkably vivid impression of railway engines and carriages from the roller-skated cast. Especially impressive are Napier's superbly conceived, magnificently executed helmets for the competing locomotives which, in incorporating all the facets of the railway engine into their very structure demonstrate stage design of the highest quality. David Hersey is acknowledged to be the leading pioneer of advanced technological lighting: it may cost

a bundle and throw budgets to the winds, but can be amazingly effective. Naturally a £2 million budget is designed to take even Hersey's most elaborate fantasies in its stride, and Starlight Express regales us with vast banks of moving lights, stunningly subtle projections, incredible filigree patterns from lasers, and an unforgettable display of twinkling white lights to evoke the realm of the great Starlight Express himself, whose technical realisation still eludes me. The sheer scale of the design achievement in this show suppresses any indignation at the size of the expenditure. After all the opportunity for two of our top designers to achieve precisely what they want, regardless of expense, can only benefit and assist the development of design in the theatre as a whole.

Work at this level certainly means that the average operatic staging can bring you back to earth with a bump. Having seen two very average productions not long after Starlight Express, I was. Both Covent Garden's new production of Bellini's I Capuleti e i Montecchi, and English National Opera's of Verdi's The Sicilian Vespers had foreign designers whose work, seen against the best of our own, such as Napier, Koltai, O'Brien, Bill Dudley, Patrick Robertson and a host of others, seemed almost unbelievably dull. In the Bellini Work at Covent Garden Pier-Luigi Pizzi's endless repositioning of a set of Corinthian columns around a Roman portico and a broad, shal-



Starlight Express by Andrew Lloyd Webber and Richard Stilgoe at the Apollo Victoria Theatre. Design and costumes by John Napier. Lighting by David Hersey. (Photo: Nobby Clark)



low flight of steps did not amount to stage design as I understand it — merely to stage decoration in the operatic style. But this, plus some very run-of-the-mill costumes and equally uninspired lighting were all we got from Signor Pizzi. It may have passed muster at the first Covent Garden performance of the work since 1848, with a stellar cast conducted by Riccardo Muti, but it's going to seem desperately boring at the revivals.

English National Opera acquired John Dexter's staging of Sicilian Vespers from the Paris Opéra, and this fifteen year-old production had been previously seen in Hamburg and New York. It is a dreary affair, designed by the Czech team of Josef Svoboda and Jan Skalicky who were much in vogue at Covent Garden and elsewhere in the early 70's and have since, thankfully, been abandoned. I find their work likewise to be the negation of true stage design, producing a dingily nondescript stage atmosphere which adds nothing whatever to one's appreciation or understanding of the work being performed. In Vespers we spent over three hours gazing at a massively lowering, steep set of darkly painted steps a Svoboda trademark this - set against a blank backcloth bathed in stygian gloom. At least it helps you to listen to the music, for the eyes close with remarkable rapidity! Skalicky's contribution was a batch of totally generalised medieval costumes which expressed no discernible character in their wearers, and Svoboda and Eric Otto's clumsy overhead lighting helped not a jot. Design of this kind is the perfect recipe for operatic tedium.

Having endured these two productions in London, it was good to find that British designers were alive and well and working in Geneva. At the Grand Theatre there I saw cinematic enfant terrible Ken Russell's new production of Rossini's comic opera L'Italiana in Algeri with sets designed by Ralph Koltai and costumes by Carl Toms. Russell, having staged a powerfully explicit version of Zimmerman's Die Soldaten - with designs by Koltai and Annena Stubbs - in Lyon last year, and followed that with a post-Hiroshima holocaust staging of Puccini's Madam Butterfly at the Spoleto Festival, had now decided to present Rossinian comedy in terms of Busby Berkeley. Thus Mustafa's establishment was not a million miles from the Algiers Playboy Club, and also contained a swish hairdressing salon, both attended by a bevy of lissom beauties in stunning diaphanous costumes. Isabella arrived there by way of her aircraft ditching in the sea, emerging from it with her Italian, red, white and green air-hostess' uniform uncreased. Koltai's immensely elegant and stylish setting used lifts and a revolve to great effect and suspended a large, angled mirror to reflect the action. Carl Toms's costumes gave the strongest support, beautifully coloured and admirably cut, and again with an unerring sense of style. When updating of opera is done with this degree of skill and with such lightness of touch it can, and in Geneva did, succeed brilliantly.

Another virtuoso display was to be found

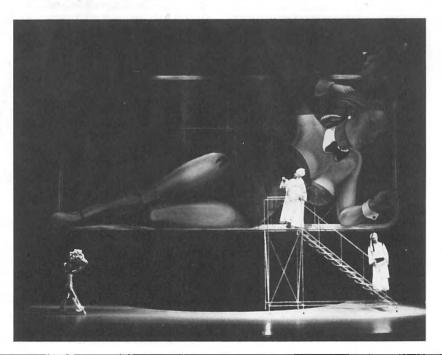
at Sadler's Wells Theatre when Ballet Rambert had a season there recently. After works that had been visually, if not balletically, disappointing, came the stage design debut of the distinguished painter Bridget Riley. Her ballet Colour Moves, with choreography by Robert North and costumes by Andrew Storer, was hugely enjoyable and visually a resounding success. Ms Riley has supplied a succession of cloths, beautifully painted in the style by which we know and admire her work: bright colours, geometric patterns, false perspective, and a touch of trompe l'oeil. The succession of blue, apricot, green, yellow, and finally vertical multi-coloured stripes, backed up by the dancers' leotards in matching shades, provided a feast for the eye and demonstrated what carefully considered,

stylish simplicity can achieve in stage design, provided, of course, that there's genius at work.

It was certainly a far cry from the two Royal Shakespeare Company productions I saw recently at the Barbican Theatre, both of which demonstrated an alarming degree of fussy self-indulgence. Both Comedy of Errors and Measure for Measure were originally seen at Stratford, but I could not escape the impression that they had actually been designed to show off on the Barbican's splendid, hexagonal open stage, so that the RSC could cut a dash in their trendy new home. Both productions were by the undeniably able young Adrian Noble, and Comedy of Errors was designed by David Ultz, whose imaginative fantasies I have always previously enjoyed in smaller scale



Ralph Koltai's designs with costumes by Carl Toms for Ken Russell's production of Rossini's L'Italiana in Algeri at the Grand Théâtre de Genève. (Photo: Martin Buck Raphanel)



houses. Here the play was seen in terms of circus and silent movie clowning and was set in a meagre, narrow cylindrical container, centre stage. The characters became stereotypes within the terms of reference, the Antipholi had bright blue faces and wore city suits, the Dromios present the full Bertram Mills bit, Adriana was a scarlet woman and her sister Lucia a crudely drawn Columbine. Nor were Bob Crowley's designs for

Costume design by Pier Luigi Pizzi for the Royal Opera production of Bellini's I Capuleti e i Montecchi (Photo: Donald Southern)



Costume design by Josef Svoboda for the new E.N.O. production of Verdi's The Sicilian Vespers. Director: John Dexter, Producer: Fabrizio Melano. (Photo: Donald Southern)



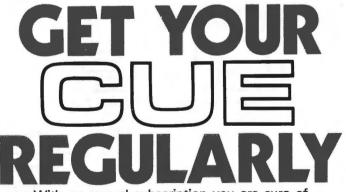


Jennifer Carey's settings, costumes and masks for George Orwell's Animal Farm at the National Theatre. Director: Peter Hall, Lighting: John Bury. (Photo: Nobby Clark)

Measure for Measure markedly more satisfactory. They certainly had more style, but less consistency, and I could not admire their restlessness and uneasy combination of theatre of cruelty, Brechtian alienation, and fussy, sub-Magritte surrealism. Far too often in both productions I was left wondering why director and designer had decided to do something, rather than being left, as surely I should, to concentrate on the play.

Altogether more satisfying were Jennifer Carey's settings, costumes and masks for Peter Hall's impressive adaptation and staging of Orwell's *Animal Farm* at the

National's Cottesloe Theatre. Ms Carey's admirably open, lightweight setting had considerable dramatic punch and wit, as well as commendable mobility, and her half-masks achieved a remarkable combination of animal features and debased human reactions. Moreover the use of short crutches as a means of the actors evoking quadrupeds while retaining full use of the stage was an inspired solution to that problem. The whole production was an object lesson in skilful simplicity: it's odd how often one discovers both the National's and the Royal Shakespeare's finest design in their studio theatres — there must be a moral there somewhere.



With an annual subscription you are sure of getting your own copy of CUE as soon as it is out—every issue. If you are not already a subscriber why not fill in the form overleaf today. If you are a subscriber give this form to a friend.

ANNUAL SUBSCRIPTIONS EUROPE & OVERSEAS: £13.00

(six issues including airmail postage)
UNITED KINGDOM: £10.50

(six issues including postage)

Subscription Form overleaf

REIDing SHELF

I am prepared to accept Simon Callow's account of BEING AN ACTOR as true. The book carries all the credibility and conviction that is a writer's equivalent of the projected truth by which an actor and audience communicate with each other. Moreover so much of his descriptions of an actor's life strikes a resonance with the doubts and terrors, the despairs and exhilarations, that are inherent in any other creative areas that I have personally experienced — from lighting a stage to writing a page.

The book is in two parts, each looking at the acting process in different ways. Firstly through an autobiographical account of the author's ten years doing the job. And, secondly, through the cycle that runs from unemployed through getting the job, preparation, rehearsal and character, getting into the theatre, dress rehearsal, first preview, first night, the reviews, the run (a good performance, a bad performance, the audience, twenty four hours in the life), the end of the run and back to unemployment again.

The final chapter is a manifesto which deplores the power of directors. That much of the book is concerned with the actor's dependence on these very directors is just all part of the contradictory tensions that are involved in being an actor.

Anyone with an interest in the creative process will read Simon Callow's book. All theatrepersons should read it. And everyone contemplating any kind of career in the theatre must read it.

Volume I Number I of the JOURNAL OF ARTS POLICY AND MANAGEMENT prints Tony Field's Alport Lecture on Commitment and Responsibility. This is exactly the sort of material that needs to be made available both to current arts thinkers and to future researchers. It is a particularly clear exposition of a today situation and fully justifies the emergence of a new journal for those who are concerned with the problems of administering the arts. The Journal is severely academic in content and layout. There is lots of white space between the footnotes. It is not really for the likes of me, a simple chap who likes his Handel but is not too concerned whether he enjoys (I quote) the licence of moral conscience, of social critic, of political demagogue. But then I rarely understand Dr Hammett or agree with Dr Pick. However I am much pleasured by a new name, Liz Wells, investigating a local authority's finely tuned concept of artistic freedom.

And for one who, in his first week in showbusiness, was instructed in the finer points of counting the house by no less than Maurice Neville, there is much enjoyment to be derived from Lucifax's analysis of Wilson Barrett's 1886 panto box office returns. Would it not be wonderful if this new Journal could persuade a cross-section of arts organisations to allow their accounts to be published! But the page that stimulated most thinking in this reader was the back cover where Rank Strand had taken a full page advert to promote a routine corporate image of their understanding of the lighting needs of hatstands (the kind with two fishnet legs). What a marvellous missed opportunity to explain the cost effective advantages of capital investment in equipment to thinking arts policy makers and managers.

Keith Diggle's GUIDE TO ARTS MAR-KETING is full of good tips on how to sell seats. It is essential reading for anyone concerned with ensuring that a performance finds its audience. It is not a comfortable read. Diggle's missionary zeal can be very tiring. He views his readers as a bunch of lousy salesmen who need to be motivated and he harangues us accordingly. My own thirty years in showbusiness have obviously been totally misguided. I have been pursuing performance quality and, even worse, using that as a criterion of success. Wrong! Sales are the real barometer of achievement says Diggle and anyone who believes otherwise is quite firmly (and, it has to be admitted, quite cleverly) put down as an artistic wet. Using some of the Diggle methods I increased my seat sales - but used the extra revenue to introduce more minority interest performances in order to provide my community with a balanced programme. I believe, so help me Diggle, that if an arts organisation is playing to an average over 85% it is not fulfilling its educational role of development.

Most marketing men inevitably are monetarists and for that reason cannot be allowed to take control of public service arts out of the hands of the artists. I am delighted to read Keith Diggle's belief that the marketing manager will never, and should never, have total control over artistic matters, administrative matters or financial matters; there must be different voices to speak up for all these interests. However I would not wish to give marketing even the equal voice that it seems to be seeking here. Please let artistic directors retain dictatorial powers until they are fired. But also please let us ensure that artistic directors and everyone else in the organisation reads this

SUBSCRIPTION FORM To Twynam Publishing Ltd., Kitemore, Faringdon, Oxfordshire SN7 8HR. Please send CUE Magazine for one year (6 issues) and -1. I enclose my cheque/postal order for £. 2. Please send me an invoice to the address below 3. Please send me a bankers order form to the address below I authorise you to debit my credit card account with VISA My Barclaycard/Visa/Access account number is NAME (Mr. Mrs. Miss). _____ ADDRESS: ____ SIGNATURE:_ DATE: * Subscription Receipts sent if specifically requested. rates are overleaf

book. Its particular importance is the way in which it tries to apply financial analysis to the effectiveness of a theatre's relations with its audience. We now need someone to attempt a similar book which would endeavour to place the whole business of cost effective staging on a similarly analytical basis. But, please, as a cool analysis and not as an evangelical polemic!

In 1683, possibly on June 3rd, Richard Sadler opened a small music house for the convenience of those who wished to take the waters of Islington as a cure for dropsy, jaundice, greensickness, ulcers, fits of the mother, virgin's fever and hypochondriacal distemper. Some of the water was brewed into beer, a flautist on a shell-work rock led the dancing, and Mrs Pearson soothed the soul with her dulcimer.

For three centuries London culture has been enriched by performances on the site of Sadler's wells thankfully, the current theatre's marketing department have not yet tried to promote bottled Islington water) and the anniversary is celebrated by what the antiquarian theatre booksellers usually call a festschrift - SAD-LER'S WELLS THEATRE THREE HUNDRED YEARS A PLACE FOR ALL PEOPLE. This includes potted histories of the building and its performers plus personal tributes from Charles Dickens, Thomas Arthur Wing Pinero, Ralph Richardson, Alicia Markova, Margot Fonteyn, Wendy Toye, Marilyn Hill-Smith and Stephen Remington who keeps alive the spirit of Richard Sadler, Joseph Grimaldi, Samuel Phelps and Lilian Bayliss. Sadler's Wells plays to good houses, so it is a little sad that the current arts funding climate requires such a celebratory book as this to devote 42% of its pages to advertisements.

From the Society for Theatre Research comes an autobiographical fragment. A mere 56 pages of which 20 are supportive material to Allan Wade's MEMORIES OF THE LONDON THEATRE 1900-1914 which forms a core that is rather more important than its slender bulk might suggest. Wade was actor, director, researcher, editor and what would now be called administrator. A comprehensive man of theatre through whose eyes we can view history in a somewhat more perceptive way than is normally possible in the reminiscences of stars with more marketable lives. I now feel closer to the flavour of the Granville Barker era and the first coming of the Royal Court. Strange thing history - recording it can be as elusive as the chemistry of performance.

When I picked up Richard Traubner's OPERETTA - A THEATRICAL HIS-TORY, I did not expect to read it in the conventional way - that is, to use a phrase of the primary educators, as continuous prose. It seemed to be more of a dipping book where I could find basic information on any piece of music theatre that escaped the operatic adjective 'grand'. There is a lot of detail in the 450 pages and so it does certainly fulfill this function. However, rather surprisingly, I also found myself using the book as a commuting read.

Potted history must be one of the more difficult categories of books to write — and to read. All these titles of shows and songs (twice when translated), composers, librettists, actors, managers, critics, theatres. It can rapidly become a mere chronology. But Richard Traubner finds a style of writing that makes us curious about works that we may just possibly hear but are certainly unlikely to see. It is always interesting to have surviving hits examined within the context of contemporary works which, although sometimes having more immediate impact, showed less endurance.

I found it particularly interesting to read of the original London and New York transfers of operettas, particularly Viennese, which are still highly enjoyable in their own countries but fail to survive the journey not so much to a new language as to an alien theatrical tradition.

I enjoyed reading this book and I shall keep it on the shelves of my working library.

Readers of this shelf will be familiar with the Macmillan Modern Dramatists series where each volume is devoted to a single or related group of playwright's life and works analysed in the context of their political, social, historical and theatrical relevance. To the sixteen titles discussed in earlier Cues are now added HENRIK IBSEN and SEAN O'CASEY plus Ernest Toller and Georg Kaiser representing GERMAN EXPRES-SIONIST DRAMA.

In my early years as a self-taught stageperson, the catalogues of Strand and Hall served as basic text books. Somehow I seemed to treasure my dog-eared copies of these catalogues with an affection that I have never been able to show towards the looseleafed technicoloured gloss of the marketology style that succeeded the cosy neovictorian corner-shop selling of the old Strand. So I have embraced the DONMAR REFERENCE MANUAL like a long lost friend. It's all here from ball raced master runner through flamebar and pyropot gold star to 16 plait natural polyester. You need never again be confused by the difference between hanging irons, flying irons and fixing irons. No space is wasted on lighting (apart from plugs, lamps, colours and gobos) so you will not be able to find the common version of the silvered hook clamp which this book was so rightly awarded at the ABTT. As a bonus you can even use the manual to buy the stuff pictured and listed within - if you are that sort of person. All

you will need is a copy of the separate price list which turns computer codes into money. Anyone who has (or aspires to) any kind of connection with the mysteries of staging just has to have these 48 pages near the top of their pile.

BEING AN ACTOR. Simon Callow. Methuen. £7.95 (UK).

THE JOURNAL OF ARTS POLICY AND MANAGEMENT. John Offord Publications (in association with the Department of Arts Administration, City University) £7.50 pa (3 issues)

KEITH DIGGLE'S GUIDE TO ARTS MARKETING. Rhinegold. £11.50 (Hardback) £8.50 (Paperback). Available post free in the UK from the publishers at 52A Floral Street, London WC2E.9DA).

SADLER'S WELLS THEATRE THREE HUNDRED YEARS - A PLACE FOR ALL PEOPLE Edited by James Runcie. Published by CGP Limited £3.50 (Paperback) (UK).

MEMORIES OF THE LONDON THEATRE 1900-1914. Allan Wade. (Edited by Alan Andrews) Society for Theatre Research.

OPERETTA - A THEATRICAL HIS-TORY. Richard Traubner. Victor Gollanz. £12.95 (UK)

HENRIK IBSEN David Thomas. SEAN O'CASEY James Simmons GERMAN EXPRESSIONIST DRAMA -ERNEST TOLLER and GEORG KAISER. Renate Benson Macmillan Modern Dramatists. £13 (UK) £4.95 (Paperback) (UK).

DONMAR REFERENCE MANUAL Donmar (22 Short's Gardens, London WC2H.9AU) £1.

Letters to the Editor

From D C Irving

Under Down Under (Cue 27)

Pleased though we always are to see Australian projects reviewed by eminent visitors, it is often necessary to comment on any written evidence of misunderstandings, even if only for the sake of some future scholarly reader aiming for a doctorate in theatre archaeology. May I therefore add the following comments to Ian Mackintosh's otherwise excellent article in your Jan/Feb'84 issue.

Firstly, I recall from listening to Sir Roy Grounds' own comments years ago, on the problems of site foundation design — the Gallery is built at ground level, but sits on piles some of which are over 100 feet long in order to reach bedrock. So, building the theatres at ground level was felt inadvisable, and it seemed reasonable to dig the bad dirt out (most of it was an old rubbish tip anyway) and sit the building directly on the solid rock beneath — the volume of the main theatre did not grow significantly, but the separate Concert Hall idea evolved as the limitations of dual use large auditoriums became apparent.

The 'prosaically successful' Adelaide Festival Centre (why does that, and the term 'theatrically workmanlike' used by Mackintosh, seem to be a criticism?) set a basic standard for stage dimensions, and for lighting control facilities using DDM/2 in both theatres. It had always been my aim to get uniform controls in all capital cities, and DDM was originally included in a technical package designed for the Victorian Arts Centre in 1976 by the then Strand Electric Australia. The demise of DDM/2 led to the development of DDM/3, later known as Galaxy, being financed partly from Australia and using a performance specification written in Melbourne after consultation with numerous leading Australian theatre personnel - so the standardisation that now exists is far from being accidental. The term 'digipatch' by the way, applies to a Melbourne built control line level patch made as an add on to MMS systems, Galaxies will use a software patch which it is hoped will allow re-numbering to simplify transfer of lighting plots from theatre to theatre.

The stage wagon system was not engineered by Telestage. It was conceived by Tom Brown as part of the original design, and the first engineering was by Hall Stage and included in the above-mentioned technical package. Later, the contracts for stage wagon equipment were awarded to what had then become Rank Australia, and were overseen by the mechanical consultants, W. E. Bassett & Partners. After Hall Stage folded, the revolve wagon only was

given to Telestage to make. I agree that a full wagon one side would have been better, but the resulting asymmetry of the plan created structural problems which the architect would not contemplate. There is a benefit though, as the 2 side stages precluded using single purchase counterweights and hence provided a stronger argument for power flying as against double purchase which had proved so unpopular in Adelaide.

As for the huge orchestra lift, this was originally planned by Tom Brown to be two lifts, but was changed to one on financial grounds.

The Brisbane Gallery and Theatre Complex now nearing completion will be the last of the major centres to be built in Australia for a while, and has a Concert Hall, plus a dual use theatre for opera/ballet or drama. Operating experiences with Melbourne, Adelaide, Sydney and Brisbane will be interesting to compare in a few years time.

D. C. IRVING
1 Princess St
Kew, Victoria
Australia.

From Francis Reid

Sir

I write, inevitably, in response to Fred Bentham's letter in Cue 28.

Lighting control desks are concerned with moves (cues) and states (presets). There were two threads of development. One thread was based on the recording of states and includes Wood's electronic, Radio City Music Hall, Izenour, and the 1966 Lincoln Centre. All these were multipreset and this became infinite-preset with the availability of memory.

The other thread included the grandmaster, light console and motorised lever of Siemens. All these plotted moves, although all three in their more sophisticated variations had facilities for presetting levels. Their shared problem was timing. A lack of proportional dimming (eg a circuit moving 3 points got there in half the time of one moving 6 points) resulted in lighting often being wildly out of balance while it was on the move between states. This could be overcome on the grandmaster by use of extra operators but on the other systems, the motor imposed a tyranny on the timing.

This was noted by Peter Hall at the 1961 ABTT international conference:

When the Aldwych was converted to its present use, the only British switchboard available was a fully automatic one — a wonder of science. It works well, except that it has to be put before the actors. Recently, I had to produce the actors to suit the switch-

board and it was necessary to instruct one actor not to move or say his line until he had seen number ten on the spot bar go out. Any alteration in this timing would have resulted in the next four lighting cues going wrong.

And that was only the actors! I can remember wincing as hot spots appeared on scenery in the early parts of a cue's progress. The light console's great achievement was reducing operation of a large number of circuits to one person. It was a good system for situations where the dimmers were used to move lamps to full or off. But delicate balances were not achieved with ease. The CD variant could reach balances but the move to them could be very unbalanced.

The core of a memory system is sequential dipless proportional crossfading. J. T. Wood's electronic could do this.

Advanced memory systems have also, of course, absorbed much of the approach of the light console, but this is mainly in the compositional phase of plotting the lighting rather in the basic philosophy underlying the function of a lighting control at performance.

For these reasons I believe that Wood in England and Izenour in America are the post-war seminal influences on lighting control philosophy. (These kind words about Izenour do not, however, extend to his influence on theatre architecture!).

The thyratron and thyristor dimmers did, of course, introduce the virtue of instant response. However the overriding influence of control philosophy is exemplified by Stuyckens of ADB who, in the early sixties, produced a multi-preset desk that was ahead of anything else in Europe. Yet he used the same type of magnetic-amplifier dimmer that was at the heart of Siemens beautifully engineered but inflexibly motor-timed system.

The sadness of today is that so many current desks lack the playability of both the Bentham console and the Wood electronic. Most systems now do what the lighting designer wants; the curiosity is that so many operators seem to prefer something that is a cross between a home computer and what Fred Bentham has so rightly dubbed a *cash register*.

To revert to the theme of my original tribute to Fred which sparked this correspondence: he is the great catalyst. What Wood, Izenour and all the rest did, and indeed still do, was to respond to Bentham. Just as one BBC response to Bentham was to ask Thorn to devise Q-File which in turn provoked Bentham into DDM. And DDM is without doubt the seminal memory system.

FRANCIS REID

Shopping at USITT

Window shopping has never been one of the especial pleasures of my life, and so I tend to approach the prospect of any theatre technology trade fair with a lowered threshold of boredom. Unless, of course, I am buying. If there is a blank purchase order in my pocket, I will compare and contrast product with all the concentrated excitement that I normally reserve for the da capo arias of Handel.

At this year's USITT National Conference in Orlando I was shopping for computer software: so I can report on that. However I cannot detail the latest cosmetic variations in lighting control desk functions and ergonomics - but do I detect that the growth in submasters has peaked and is being overtaken by an escalation in the number of video display screens per system? The only American lighting instruments

which induce any envy are the Super Trouper Follow Spots. I feel little need to look beyond CCT for cost-effectiveness in getting general light on to a stage - and, by the activity on the CCT exhibition stand. quite a lot of American lightpersons seem to share my view. However, sheer quality in luminaire design and construction was, as always, represented by Pani's Viennese range although their display did not include their latest scene projector which pumps 6kW of HMI through a 24cm square slide.

But this was not just a lighting show. Or a sound one either. It was strong in all the staging trades from consultancy to costuming. And for anyone contemplating a career there was a corridor of colleges offering classes in every possible curricular combination.

Some companies lead, others follow.

- Rosco is never one of the "me too" companies: they always seem to be in the innovative lead, responding to the needs of the industry and helping themselves by helping us. So it was no surprise to find that they are offering some of the more imaginative software for the microcomputers that will soon sit on the desk of every thrusting designer and production manager.
- I am not yet personally using microprocessed information technology. These words, being a solo piece, are being composed by my standard technique involving a pen and the alternate lines on narrow-ruled A4; however I would be reluctant to write any kind of joint report without the help of a word-processor. When designing light I still use a protractor and scaled rule to relate throw, area and beam angle, rather than the pocket calculator favoured by my younger colleagues. But as the range of available spotlights increases, I can forsee that a programme such as Rosco's Stagelights could be labour saving in the nicest possible way by taking out some of the grind and guess work of the craft to allow maximum concentration on the art. And if I was managing any sort of technical department I would certainly wish to hold budgetary and inventory information in a microprocessor storage system allowing not just instant access but immediate manipulation.

At USITT I felt that Rosco probably have the edge in terms of the user-friendliness of their software programmes, although Art-Soft have some intriguingly titled packages such as Fund Raising and Not-For-Profit Accountancy. Art-Soft also have an interesting sales technique: a 25 dollar Demo-Diskette lets you decide on your own computer whether you want to lay out 500 dollars for the complete programme.

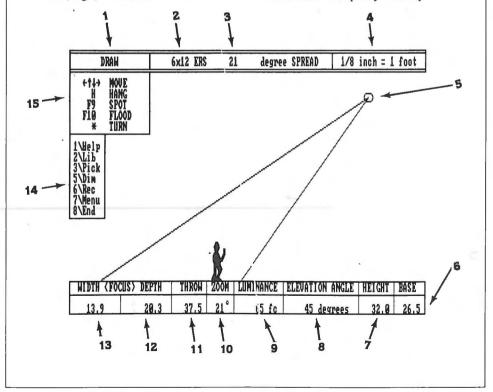
Apart from the Rosco Stagelights programme which relates actor and spotlight in a graphic format, all the software on sale seemed to be processing information in the form of verbalised data. There is a lot of work going on in America (and some in Britain) using computer graphics to relate and scale scenic elements, viewing them from different angles and painting them with finely resolved colour. But this was not on show. It would surprise me not at all if software packages did not become the big growth area of USITT and other trade fairs over the next two or three years.

PS. I arrived in Orlando just too late for the conference session called New Products Showcase. Giving each exhibitor two minutes to present three slides must have concentrated the minds of both seller and potential buyer. And would have concentrated my thoughts - giving Cue a more detailed report!

1. Current Function

- 2. Current Instrument Type
- 3. Standard Spread (in Degrees)
- 4. Current Scale of Drawing
- (changes position in drawing as instrument is
- 6. Distance from Focus to Vertical Plane of Instrument Position
- 7. Trim (height) of Instrument Position

- 8. Elevation Angle of Instrument
- 9. Luminance in Foot Candles at Focus
- 10. Current Spread of Instrument
- 11. Distance from Instrument to Focus Point
- 5. Relative Position of Instrument Described 12. Upstage/Downstage Dimension of Covered Area at Focus
 - 13. Stage Left/Stage Right Dimension of Covered Area at Focus
 - 14. Mini-Menu of Functions
 - 15. Definitions of Frequently Used Keys



Rosco's Stagelight software allows a microcomputer to be programmed to give a dynamic graphic video display of the interaction of beam angle, throw and spread

FRANCIS REID

Three Home, One Away and One to Come

D. C. IRVING

Cue readers have been treated recently to articles on some of the larger theatre buildings in Australian capital cities and may therefore be forgiven for thinking that there is little other theatre activity here. Such an impression would be wrong indeed especially in South Australia, a State which is well-known internationally as the home of the Adelaide Festival and which has a long and worthy history of support for performing and visual arts, which is continuing to the point where the long-term planning is beginning to show real results.

South Australia has a total population of around 1,200,000, with just under 1,000,000 in the City of Adelaide with the remainder scattered over an area eight times greater than England. With this large area in mind the Government Dept. of the Arts has divided South Australia into four regions each having a Regional Cultural Centre

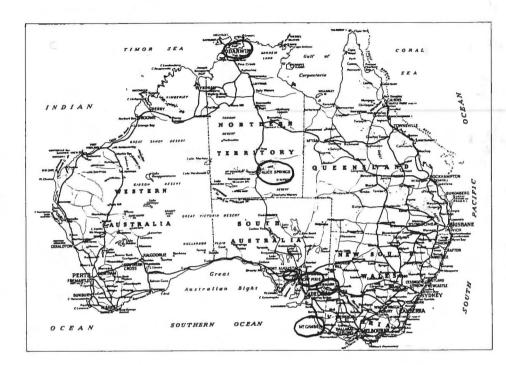
Trust.

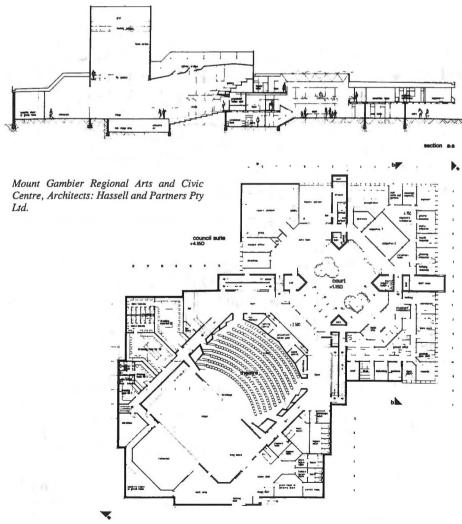
Each of these Trusts is a Statutory Authority with a broad brief giving it responsibility not only for operating and maintaining a theatre and gallery complex but also to act as a local resource of equipment and expertise to promote the development of smaller venues and performing groups in the particular region. The long-term plan is to establish permanent professional performing groups in each region and one such, The Harvest Theatre Co. is already working in the Eyre Peninsula even though its theatre is not yet built. The Eyre Peninsula region is roughly the same area as Belgium and has a total population of only 60,000. The Regional Centre Theatre for that area, to be situated at Whyalla is in the very early stages of construction and will be the final regional centre in the current programme. The other three centres are the South East region with a theatre at Mt. Gambier; the Riverland region with a theatre at Renmark and the Northern region with a theatre at Port Pirie. The four regions are shown circled on the map with associated centres in the Northern Territory also marked.

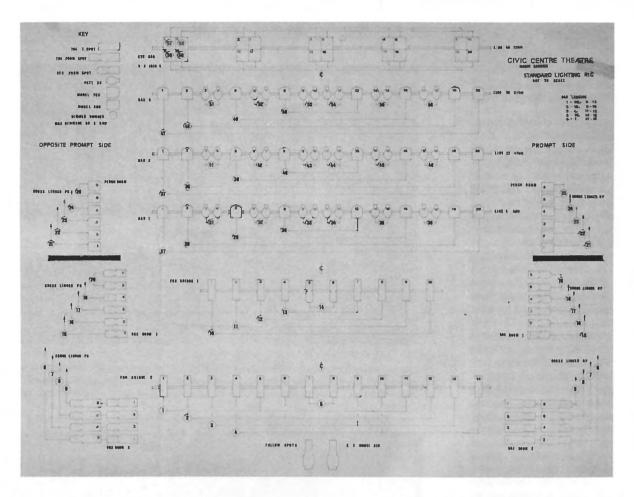
Complementing the South Australian activity are projects in the Northern Territory immediately to the north of South Australia where there is a 1000 seat theatre under construction in Darwin and a smaller centre just completed in Alice Springs. Because Alice Springs has a close association with South Australia, the Araluen Arts Centre there has consciously been designed with a family resemblance to the four South Australian theatres, and the managements of all five keep in regular contact in order to plan co-ordinated tours of various pro-

ductions.

Dealing with the various venues in chronological order of completion, the Mt. Gambier Theatre was finished nearly two years





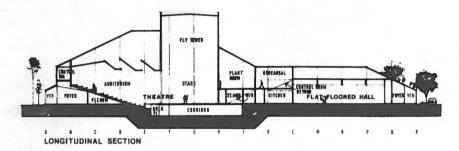


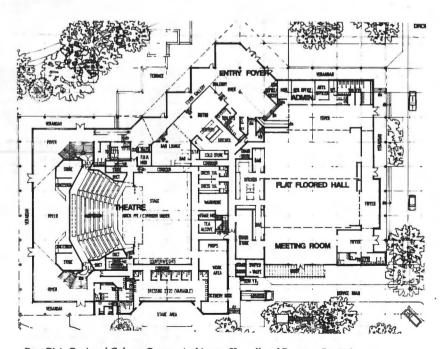
ago and has recently been re-named in honour of a famous Australian theatre person, Sir Robert Helpmann (the renaming ceremony being carefully arranged for Friday the 13th April). As can be seen from the photographs and drawings the theatre is incorporated in the Mt. Gambier Civic Centre hence the building includes Council offices and library as well as the theatre itself. The staging is conventional proscenium with single purchase counterweighting and a small orchestra lift. The auditorium has two levels, although the stalls level does not go further back than the front edge of the gallery, hence the control room is in a very convenient position immediately under the gallery, looking straight onto the stage and with access directly from the foyer. Front of house lighting positions are well provided by bridges and side slots, the lighting is controlled by an 80 way 3 preset board similar in function to Rank Strand AMC but manufactured in Sydney by a company called Q Engineering which started life as the Australian agents for the Thorn Theatre Lighting Division.

Dean James, the resident technical director there has evolved a basic lighting rig which reduces the time required for bump in of the mainly visiting shows — with his kind permission, this is reproduced herewith, and may give rise to interesting comparisons with similar lighting tasks in the Northern Hemisphere.

There is a large recess in the rear wall of the stage, creating what the drawings refer to as a rehearsal area. In practice this has proved no help for rehearsals but has been useful otherwise as a scene dock, or an area large enough to take a stage truck almost the

Dean James' plot for a basic lighting rig at Mt Gambier





Port Pirie Regional Culture Centre, Architects: Hassell and Partners Pty Ltd.

size of the full acting area. The interior decor and much of the structure is of pine timbers, this being the principal activity in the Mt. Gambier district.

The next centre to be completed was designed by the same architects, Messrs Hassell & Partners, to a brief prepared by Tom Brown & Associates who advised on all of the theatres described in this article (with the exception of Renmark). This is the centre at Port Pirie, which has been named after another well-known Australian. Keith Michell who, fortunately, was able to present a version of his one man show as the opening performance for the theatre. This incidentally was well received although it was necessary to explain to some of the local residents that even though they had seen Henry VIII on television it was still worth a visit to the theatre.

Mt. Gambier is about 1,000Km south east of Adelaide, Port Pirie some 500Km roughly north. The Keith Michell theatre does not incorporate Civic offices but does have quite a large flat floored hall alongside. It was originally felt by the locals that this flat floored hall would attract more bookings in the first year than the main theatre, but the reverse has been the case. The theatre seats approximately 500 people, in line with its brethren, the auditorium being divided at a point about 300 seats back by a cross aisle and a low wall. The intention here is that by not using the house lights beyond that point, it is possible to treat the auditorium as 300 seats in a more reasuring manner than with many empty seats visible. Again, thanks to Tom Brown's brief there are two wide front of house lighting bridges, front of house perches either side, and a large control room at the rear. This theatre does not have a lift as equipment funds were severely limited, however a pit or fore-stage can be created by using rostrum assemblies.

Some months after the opening in October '82, I had the pleasure of seeing a local amateur production in the Keith Michell Theatre, of 'Cat on the Fiddle'. Not only was it well attended by a paying audience, but in discussion with the cast and producer afterwards it became evident that everyone thoroughly enjoyed the experience of working in a 'real' theatre as opposed to a local



Chaffey Theatre, Renmark (Riverland Cultural Centre Trust). A drama workshop is incorporated on the site. The excellent control room has a commanding view of the stage and includes a CCT/Datalite Multiset. (Photographer Terry Manten)



Counterweight system, Mt Gambier Theatre

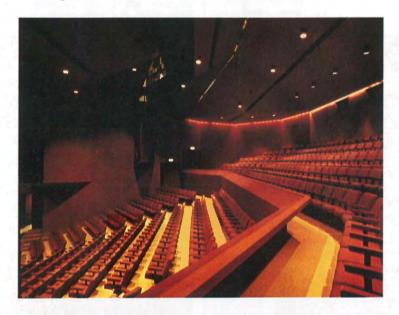


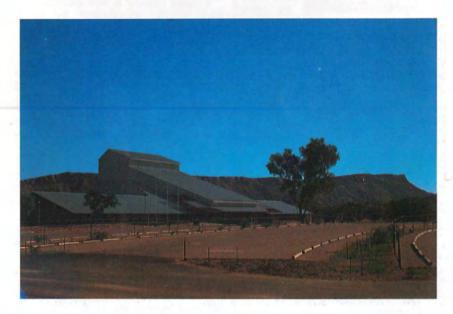
Lighting slots and bridges, Mt Gambier Theatre





The Keith Michell Theatre at Port Pirie and (below) the auditorium showing cross aisle and low wall which marks the divide whereby seating capacity is reduced from 500 to 300 seats when required.





The Araluen Arts Centre with Mount Gillen as backdrop (Photo: Jonah Jones)

multi-purpose monster, and that the new facilities would indeed foster both interest and ability on both sides of the curtain.

Next, the Chaffey Theatre at Renmark in the riverland area north east of Adelaide. The district has several small towns in an irrigation area by the Murray River, pioneered by the Chaffey Brothers about 100 years ago, and settled later by many returned soldiers from World War One. It is now famous as a producer of dried fruit, citrus fruit and wines - definitely a civilised place for a theatre! Built on an Education Department site, and incorporating a drama workshop for the adjacent high school, the Chaffey follows the same stepped auditorium style as the Keith Michell, but has smaller foyers and public areas. FOH bridges and side slots are similar, but this being a Government Architect designed building, 'they' were persuaded that the stage and auditorium could be treated as one single fire risk volume (500 seats again) so that the two fly galleries carry on at one level past the proscenium line, link with the FOH bridges and finish up as the control room roof, with trap and ladder access.

This also provides an occasional position for follow spots or television cameras, and ducts have been provided to allow temporary cabling to anywhere without having to prop doors open.

The stage is compatible with the other regions, again with single purchase counterweights, supplied by Stagecraft of Western Australia, a mere 2000Km away. Budget restrictions being ever present, only 35 sets are initially installed, however all the guides are there, so sets can be moved or added fairly easily.

Experience with Mt. Gambier, Port Pirie, and other places led us to plan for stage lighting control expandable to 80 channels (see the abovementioned Dean James plot and you'll see why) and ideally having both manual and memory functions. Pirie has Rank Strand AMC, and therefore could use M24 (but why in the name of marketing does it stop at 60 channels?) but Chaffey and Whyalla opted for CCT/Datalite Multiset. All have plug and socket (using our wonderful plug adaptors) patching to 200 stage circuits.

The 2 later SA theatres, and Araluen at Alice Springs have another Australian innovation, called the DTM stage management system. This Adelaide designed equipment by Entertainment Audio, provides the usual SM talkback and cuing facilities, but does this by multiplexing down a standard microphone cable ring, daisy chained or looped to standard XLR3 outlets. Outstations can be individually addressed, and both voice and cue light information go down the one line.

Only slightly later than Renmark, the Araluen Theatre is on an historic site in Alice Springs, i.e. the first airfield (graded originally by its creator Eddie Connellan

8-0 82 1

Araluen Arts Centre Theatre, Alice Springs, Northern Territory. Architects: Hassel and Partners.

with a Phantom II Rolls Royce towing a length of RSJ) just out of the town centre, with Mount Gillen as backdrop, (see photo)

The Araluen Centre takes a step further in auditorium division, as it has a lightweight curtain on a motorised track directly behind the 6th row of seats. With the house curtain down and the stage lift up this creates an intimate theatre of the end stage variety. If you prefer Stephen Joseph style, then there are 4 blocks of fully mobile seating which can be arranged on the stage itself, giving a theatre in the round arrangement. The stage lighting control, in this case a Duet fitted for 60 channels, can be operated in the control room or transferred to alternative connectors on stage as required. Unfortunately for the construction budget, the Northern Territory administration chose to follow NSW regulations and this theatre has a rigid fire curtain and considerable emphasis on fire isolation of various areas and a complete automatic sprinkler system throughout.

Araluen from the outset caters for the visual

as well as the performing arts with 2 large enclosed gallery areas with an open sculptured garden between, complete with 'the' tree which was carefully guarded through the whole building progress. Additionally some old buildings existing on site are being renovated to provide homes for local art and craft organisations and a small residence for visiting artists.

So, Central and South Australia now is to have a string of fine compatible theatres, and already experience with the first two is showing that the aspirations of the State Governments concerned are well on the way to being achieved, and that jobs will be created as well as leisure hours improved.

The author would like to thank the Mt. Gambier Regional Arts Centre Trust; the Araluen Arts Centre Trust; the Riverland Cultural Centre Trust and the architects Hassell and Partners for their assistance with photographs and drawings

The Wooden O

A report on a lecture by Richard Pilbrow on "Technical Aspects of the Theatre", delivered at the Oxford Playhouse on 23 November 1983.

STEPHAN CHAMBERS

Richard Pilbrow's lecture on 'technical aspects of the theatre' was the last in a series of talks on the theatre given at the Oxford Playhouse towards the end of last year. The other lectures in the series had concentrated largely on the human forms which traditionally fill our stages and attract our critical attention. The purpose of this lecture was to displace actors and directors and focus instead on what is mistakenly referred to as 'behind the scenes' endeavour. Pilbrow set out to demonstrate that theatre design and technology are fundamental to our experience of drama. With a good deal of historical detail, he demonstrated how developments in theatre history were dependent on developments in technical history. He showed for example, how the advent of electricity about a century ago very quickly became a major new force in the physical staging of theatre and how it changed the nature of theatre space. The ability to place lighting remotely from the action allowed designers to fill spaces and change focus, fulfilling Gordon Craig's dream of a three dimensional sort of theatre in which light would be used as it is in nature, in a powerful and evocative manner to shape the stage and the actors upon it. From the beginning, Pilbrow stressed lighting as our "most powerful visual and emotional stimulus", without which we and the theatre are blind.

Richard Pilbrow is well qualified to give such a talk. Responsible for founding 'Theatre Projects Ltd.' in 1957 and for the lighting design for over two hundred shows stretching from London to Moscow, he has also been a consultant planner of most of the major new theatres of the last two decades. His work includes the National, the Barbican, the Royal Opera House, the Lisbon Gulbenkian, the Hong Kong Arts Centre as well as a host of others. He has helped to redesign the St Lawrence Centre in Toronto, contributing to the success of an establishment once dubbed the 'crematorium' by actors, critics and audiences. Such a catalogue of technical achievements is complemented by Pilbrow's involvement in artistic production. He has co-produced West End successes like Fiddler on the Roof, Cabaret and A Little Night Music. He was then, well placed to inform and entertain the full house which greeted him in Oxford.

Pilbrow's task in his hour long and largely informal lecture, was to reconcile what he called the 'slightly contradictory' words:

'technical' and 'theatre'. While his talk clarified the contradiction, as indeed his career has done, it never quite reconciled the two elements. He pressed the crucial role of improved technology in the theatre while freely admitting a belief that drama was simple, spontaneous and human. One of his favourite slides for example, was of a nineteenth century Chinese puppet show, whose technical aspects, although naturally not absent, were far from complex. He also ruefully admitted that shows which sacrificed a spiritual core to the exigencies of elaborate technical detail, were likely to fail. On the other hand, he cited shows like Cats, in which music, text, lighting and performance achieved a fruitful blend of modern technology and more traditional stage craft. He praised the inventiveness of lighting and design which characterised Olivier's production of Three Sisters at the Old Vic for example, in which vertically hung strings filled the set, and refracted backlighting to suggest various times and moods. Pilbrow's point, it became clear, was that technical aspects of the theatre are not secondary elements, added at some point during rehearsals, they are the necessary consequence of any act of staging. But while artistic production could survive without obvious technical assistance, technical developments in the theatre needed to be made with an awareness of human and artistic considerations. This brought Pilbrow round to an examination of theatre design and architecture.

Here, Pilbrow's emphasis was on flexibility and an understanding of audience motives and needs. He traced the history of theatre design from ideal Greek and Elizabethan origins, through the retreat of actors from the audience to behind a proscenium arch, to a more recent, cautious return to arena staging and involvement with the audience. He discussed modern theatres which he considers exemplary, like the Manchester Royal Exchange, and the Cottesloe, and he mentioned theatres which he found deeply unsatisfactory, like the O'Keefe Centre in Toronto. This monument to impersonal design he characterised by an anecdote: While in Toronto, Pilbrow

requested a 6'2" technician to stand on stage while he retreated to the back row of the 3,200 seat auditorium. From this position, the technician's perspective height was 3/8". "This way theatre is finished" was the wry conclusion. What lay behind this anecdote was of course, Pilbrow's resolute preference for theatrical intimacy. He seemed to be most in favour of those theatre spaces invited a comparison which Elizabethan or Georgian courtyard spaces: spaces which invited the audience to cluster round and become involved as a congregation. The epitome of such a feeling he found in the Yorkshire Mystery Plays at the Cottesloe, where actor and audience were allowed either to mingle or to retreat to a higher tier in the interests of comfort or embarrassment. In the light of this it is not surprising that the "most amazing theatre" for Pilbrow is the Royal Exchange in Manchester, whose design allows an audience to be both around and above the action. In Pilbrow's words, to be situated both in 'plan' and in 'section'. The result is a "crucible of energy" which inevitably encour-



Chinese 18th century one man puppet theatre.



Lighting for Genesis employing Vari-Lite computer remote controlled pan, tilt, focus and colour change instruments.



Wilde Theatre, Bracknell. England's latest courtyard theatre.



Laurence Olivier's production of The Three Sisters, designed by Josef Svoboda, lighting by Richard Pilbrow.

ages both performers and audiences. Interestingly, Pilbrow revealed that the most distant member of the audience at the Royal Exchange, is never more than 30 feet from the centre of the stage.

A recurring theme in the lecture was the necessity of bringing the audience back down the side walls of theatres, even in non-thrust productions. Pilbrow quite clearly favours a return to boxes. When questioned at the end of the talk, he stated categorically that the poor sight-lines which boxes often entail are a small price to pay for the increased general enjoyment which their presence promotes in the whole audience. Theatre consisted, he said, of "contact and mutual awareness". This can only be achieved if theatre design takes into account the necessary proximity of audience and performer.

Those who expected Pilbrow to expand on current and complex issues of lighting, sound and design were largely disappointed. He confined his talk, as befits a general lecture, to general principles and historical elucidation. His case for the importance of stage lighting for example, proceeded from the sound logic that our experience of the moon is entirely determined by the angle from which it is lit. From this general illustration, he went on to illustrate that inspired stage lighting would entirely alter our experience of artistic content; quite artificially creating what Harold Hobson called "multifarious painted backcloths"

purely from light. As a form of lighting designers credo, Pilbrow stressed that the behaviour of natural light is the most fundamental inspiration and that the use of light in space should always add to the thing portrayed. Interestingly, he asserted that theatre could and should learn from the lighting displays of contemporary rock bands, signalling those of Queen and The Rolling Stones as particularly innovative. Their budgets are of course, considerably greater than those available to theatres, but the techniques might be learnt.

At a specific technical level, he predicted that future lighting boards with microprocessor controls, would need to function along the lines of his own 'Lightboard' which he designed for the National; having both 'buttons' and 'wheels' and with the ability to be played like a piano and not like a computer. Again, this resolution of human and technical was an attempt to reconcile the words of his title. Critical of some computerised lighting systems, Pilbrow implied that lighting boards would never function as creative instruments until the advantages of computerisation were allied to human, artistic control. The obvious point which he stressed was that theatre lighting boards would profit more by being designed by experts in stage lighting than by experts in micro-processing.

Pilbrow ended his entertaining and informative lecture with words he borrowed from Peter Brook. They summarised

entirely Pilbrow's own position, and are worth repeating here:

It's not a question of good buildings and bad, a beautiful place may never bring about an explosion of life, while a haphazard hall may be a tremendous meeting place. This is the mystery of theatre, but in the understanding of this mystery lies the only science. It's not a matter of saying analytically what are the requirements, how best they can be organised. This will usually bring about a tame, conventional, often cold hall. The science of theatre building must come from study of what it is that brings about the most vivid relationships between people.

'Mystery' and 'science'; 'technical' and 'theatre'. For Pilbrow these are not irreconcilable opposites. The features of both must be understood and developed so that each can profit from the other. Shakespeare's 'wooden O' managed to incorporate an 'explosion of life' without electric light or sound. Today's theatres are mainly brick built O's which can profit from sophisticated technology. Pilbrow's point was that they can best do so by understanding the mystery of drama itself, and by banishing any contradiction which exists in the phrase 'technical aspects of the theatre'.

The author wishes to thank Dr. Lawrence Bachmann for the use of his BBC tapes in checking some details.



YOUR SHORT CUT TO THE BEST FILTERS

COLOUR EFFECT FILTERS

Product	Effect Colour
101 Yellow	Sunlight and window effect – pleasant in acting areas
102 Light Amber	Lamplight effects – dawn sun effects – pleasant in acting areas
103 Straw	Pale sunlight through window effect warm winter effect
104 Deep Amber	Mood effect on backings. Backlighting of floor and colour effect Mainly light entertainment, functions. Fire effect if used with 106, 166, 10
105 Orange 106 Primary Red	Strong red effect
107 Light Rose	As for 104
109 Light Salmon	Interesting back lighting
110 Middle Rose	Pleasing effects for theatrical lighting
111 Dark Pink	Good for cycloramas
113 Magenta	Very strong – used carefully for small areas on set
115 Peacock Blue	Pleasing effect on sets, cyclorama cloths backlighting (ice rinks, galas, etc.
116 Medium Blue Green	0 0
117 Steel Blue	Night effect used on sets – cycloramas
118 Light Blue 119 Dark Blue	Strong night effect Mood effects – jazz clubs etc., back projection. Travelling matt blue
120 Deep Blue	Pleasing effects for theatrical lighting
121 Lee Green	Cycloramas
122 Fern Green	Cycloramas – good for mood effect
124 Dark Green	Cycloramas – good for back lighting
126 Mauve	Cycloramas – good for back lighting
127 Smokey Pink	Cycloramas – set lighting, disco's
128 Bright Pink	Cycloramas – good for back lighting – strong effect
130 Clear	Used in animation and projection work
132 Medium Blue	Set lighting – travelling matt blue
134 Golden Amber 136 Pale Lavender	Set lighting – amber with a touch of pink
137 Special Lavender	Set lighting – the subtlest of the lavenders Set lighting – lavender with blue overtones
138 Pale Green	Set lighting – less than half strength 121
139 Primary Green	Set lighting
141 Bright Blue	Set lighting – slightly darker than 118
142 Pale Violet	Set lighting
143 Pale Navy Blue	Set lighting – reduces intensity without too much blue
144 No Colour Blue	Set lighting
147 Apricot	Pleasing effects for theatrical lighting
148 Bright Rose	Set lighting – half the strength of 113
151 Gold Tint	Pleasing effects for theatrical lighting
152 Pale Gold 153 Pale Salmon	Set lighting – subtle warm effect Set lighting
154 Pale Rose	Pleasing effects for theatrical lighting
156 Chocolate	Cyclorama cloths – 34 back for dark skin tones
157 Pink	Dance sequences. (Useful for softening white costumes without affecting
- V	skin tones)
158 Deep Orange	Fire effect – sun sets
159 No Colour Straw	Warm effect – pale tones
161 Slate Blue 162 Bastard Amber	Set lighting – a very cold blue Set lighting – half the strength of 152
164 Flame Red	Disco effect – developed for hell fire scenes
165 Daylight Blue	Set lighting – keylight for moonlight effect
166 Pale Red	Good for light entertainment
170 Deep Lavender	Set lighting – disco's – theatres
174 Dark Steel Blue	Set lighting – creates good moonlight shadows
176 Loving Amber	Set lighting – pale pink enhances skin tones
179 Chrome Orange	Combination of 1/2 CTO & double strength 104
180 Dark Lavender	Pleasing ffects for theatrical lighting
181 Congo Blue	Theatre and television effect lighting
182 Light Red 183 Moonlight Blue	Theatre and television effect lighting Theatre and television effect lighting
184 Cosmetic Peach	Theatre and television effect lighting Pale tints complimentary to Key lighting
185 Cosmetic Burgundy	Pale tints complimentary to Key lighting
186 Cosmetic Silver Rose	Pale tints complimentary to key lighting
187 Cosmetic Rouge	Pale tints complimentary to key lighting
188 Cosmetic Highlight	Pale tints complimentary to Key lighting
189 Cosmetic Silver Moss	Pale tints complimentary to Key lighting
190 Cosmetic Emerald	Pale tints complimentary to Key lighting
191 Cosmetic Aqua Blue	Pale tints complimentary to Key lighting



LEE FILTERS

ADVANCING ART THROUGH ADVANCING SCIENCE

Lee Filters Limited,

Central Way, Walworth Industrial Estate, Andover, Hampshire SP10 5AN England. Tel: Andover (0264) 66245 Telex: 477259

Lee Northern, Old Wellington Road, Eccles, Nr. Manchester. Telephone: 061 707 6000

Lee Enterprises, 128 Wembley Park Drive, Wembley, Middlesex, HA9 8JE.
Telephone: 01 903 9811

MANTUA: Teatro Scientifico

In all my life I have never seen anything more beautiful of its kind. It is not a theatre, but a hall with boxes like an opera house. Where the stage ought to be, there is a raised platform for the orchestra and behind the orchestra another gallery built with boxes for the audience.

Thus wrote Leopold Mozart to his wife following a concert by their son in Mantua in January 1770. This concert was given in Antonio Bibiena's Teatro Scientifico which had been inaugurated the previous month. Mozart was then approaching his fourteenth birthday: I doubt whether my guide of two centuries later was any older. With solemnity he sold me my ticket and with pride he led me to each level in ascending turn, throwing open the box doors with an expectation of response. The four tiers exercised my vocabulary to its limits - bello, molto bello, bellissimo, molto bellissimo. These exclamations were received as just, if barely adequate, assessments. He sat in the stalls while I took command from the stage. But I could not find the courage to vocalise in his presence.

Echoing the auditorium on the stage was a common temporary device in the eighteenth century. It was a scenic arrangement that often accompanied the raising of the pit floor to stage level to provide an assembly hall for balls and masquerades. And it is a device that is in continuing, if occasional, use when concerts are given in theatres. The



Bibiena's Scientific Theatre 1769. Also the permanent 'stage set' which served as additional boxes for concerts and assemblies



WHITE LIGHT 57 FILMER ROAD LONDON SW6

Theatre lighting design, control, equipment and hire

Audio-Visual presentation design and projection

Equipment maintenance and refurbishing

Installation, distribution systems, special effects

OUR PRICES ARE COMPETITIVE PLEASE RING US FOR A PRICE LIST OR QUOTE

01 731 3291

Teatro Scientifico is rather unique in that the structure on the stage is permanent. The theatre was intended as a hall for concerts and assemblies by the learned academicians who commissioned it. But in form it is pure opera house: mask off the permanent 'stage set' and we have a genuine theatre auditorium, very close in spirit to Antonio Bibiena's Teatro Communale in Bologna, completed four years before the Scientifico

was started. (The Communale is also stillwith us in a form very close to its original.)

The Teatro Scientifico was given a magnificent restoration for its bicentenary. It reopened in 1982 with a concert given appropriately by the Mozarteum Orchestra celebrating that earlier journey from Salzburg to Mantua.

FRANCIS REID

