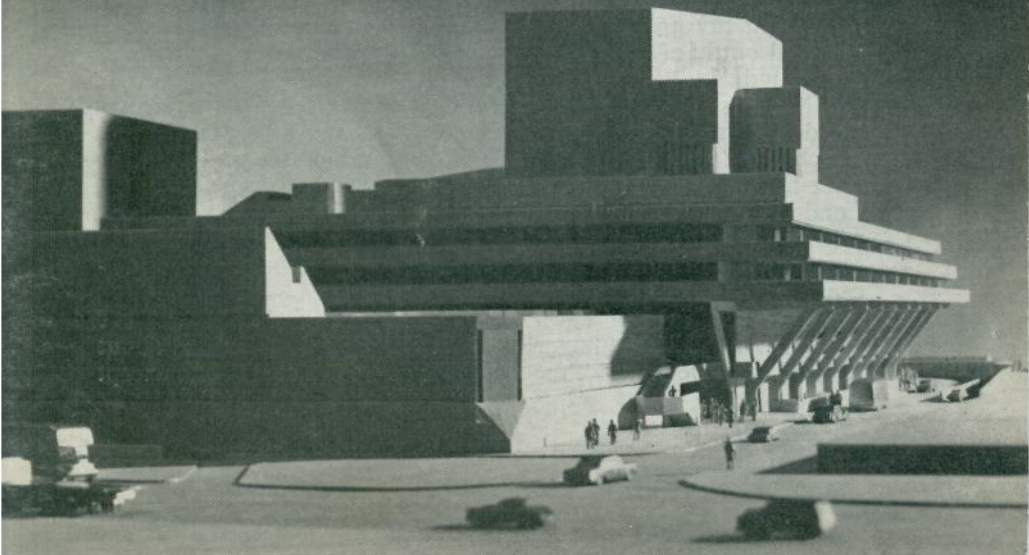




TABS

MARCH 1968 VOL. 26 No. 1



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Modified Rapture

On Thursday, February 2nd, 1968, Miss Jennie Lee, in reply to a question in the Commons, announced that "the Government were prepared to share the cost of the National Theatre equally with the Greater London Council, subject to a maximum contribution related to costs at the tender stage of £3,750,000 and that a Bill would be introduced to remove the previous limit of £1 million".

Hugh Jenkins, M.P., in saying that "while welcoming the fact that legislation is to be introduced, it would give greater pleasure to see one brick placed on another", echoed what so many of us are thinking. So did Sir Laurence Olivier with his "It is the best news for me in my professional life. But I shall not be cracking my personal bottle of champagne until the building starts to rise from the ground."

Mr. Desmond Plummer, leader of the now Conservative Greater London Council, has also welcomed the news and has thereby scotched the rumour that his party might not hold the project in the same high esteem as their Labour predecessors. It was of course the London County Council and after them the Greater London Council who have made the running. It is they who as well as putting up the same amount of money as the Government, also donate the magnificent South Bank site.

With all this good news why is there still a feeling of unease? The answer lies in the financial crisis. H.M. Ship of State is about to sink, or so we are told, though as far as we can see no-one except

the captain and first officer really believes it; and even they do so only because of advice from a part of the world which has no navy at all. The common fear is that someone may decide that we cannot afford this money, one hesitates to call it a "sum of money" when considering it relative to what we spend on tobacco and gambling, for example. In any case dare anyone now question the rightness of the decision in the far more desperate days of 1948 to clear London's South Bank and stage the 1951 Festival entertainment of which the Royal Festival Hall is a splendid survivor? The Editor of TABS believes, however, that what has bedevilled the building of a national theatre has not been the absence of money but the absence of plans—practical auditoriums and stages drawn firmly and clearly on paper. Take heart readers therefore, because for the first time since the Stafford Cripps million pounds of 1949 there is a tangible answer to the question "what kind of theatres do you want to build on the South Bank?" The plans now published *can* and therefore *will* be built.

Full Marks

According to the handout issued in conjunction with the recent "Modern Theatre Architecture in Germany" exhibition in the Royal Festival Hall there are 222 opera houses and theatres in the Federal Republic. After World War II 207 had to be repaired, partly rebuilt or in a number of cases, entirely reconstructed. Total costs amounted to over £100,000,000. At present there are a further seven large theatres under construction or planned for which another £29,000,000 has to be provided. The 165 theatres (totalling 120,000 seats) run by the Länder or local authorities are subsidised to the extent of £35,000,000, or so annually. The D-mark figures have been converted to £s by way of example. We do not need to point out that £s sterling are not accustomed to being used in such quantities for such purposes.

Per Ardua

Attending the opening of the German Theatre Exhibition involved something of an ordeal. To approach the Royal Festival Hall from the car park or from that great centre of public transport, Waterloo Station, means long and exposed walks over paving liberally endowed with puddles while there descends from heaven ample reinforcements for any of this fluid displaced by one's footsteps. How is it that access to this great cultural centre, also one day to include three theatres as well as today's three concert halls, ignores so completely the problem of rain? This stuff is not unknown in Britain, the G.L.C. cannot claim to be taken by surprise. To put it mildly it is hardly considerate to expect the public to make the long walk out there in the driving rain. No novel principle is involved, the South Kensington Museums have had their subway from the station and Olympia and Earl's Court their covered ways for many years.

THE BOLTON OCTAGON

by Percy Corry

Whether one is enthusiastic or sceptical about the virtue of adaptability in theatres, the Octagon will be recognised as a very attractive and practical solution of its own particular brief. The whole venture is a tribute to the energy and competence of the people involved. So far as Bolton is concerned the project began in March 1966 when a group of students from Loughborough College of Education, led by Robin Pemberton-Billing approached the Council with results of a survey they had undertaken and with carefully worked out ideas and proposals for a new theatre. Fortunately Bolton had available an excellent site in the centre of the town: equally fortunately they had a Council and a Borough Architect willing to have a go. By January 1967 enough money had been obtained or promised to justify the go. The foundation stone was ceremonially laid on April 14th, 1967, and as nobody wanted to emulate those who shift around the stone of the National Theatre, building went ahead. Seven months later, on November 14th, the first public performance was staged in the theatre and Princess Margaret officiated at the opening ceremony. It would have been appropriate, perhaps, if Prince Philip had been involved in the royal patronage: there had obviously been purposeful extraction of fingers to an extent unusual in building projects, whether civic or private in enterprise.

A proscenium stage was never required and, quite logically, there is no fly-tower. By a combination of permanent seating tiers, shallow balconies and movable tiers including retractable units, it is possible to create three separate forms of theatre . . . an open end-stage, a centre stage for theatre in the round and a thrust stage. The end-stage, which could be quite appropriately called a "space" stage, is created by a number of 6 in. high rigid rostrums. Theatre

in the round fulfils the basic need often stated by the late Stephen Joseph that on each side of a line drawn through the acting area there should be an equal number of seats.

The main structure of the auditorium is hexagonal, a shape stated to have simplified planning and construction, but the seating is arranged in octagonal form when it encloses the central acting area. The audience have the advantage of sight lines as near as may be to those in a circular auditorium. Each form of seating has an **illusory appearance of permanence**: there is no indication of any portability and all seats are within 30 ft. of whatever acting area is in use. The total capacities are: centre stage, 422; end stage, 356; thrust stage, 322. Of these, 195 seats are permanently fixed. The rest are on retractable tiers or are placed on movable structures manually assembled and dismantled, and also on the platform which continues the first floor balcony level at the rear of the end-stage area. The seats are of good design and are comfortable; the rows, praise be, are at 3 ft. centres and the tiers have 17 in. risers.

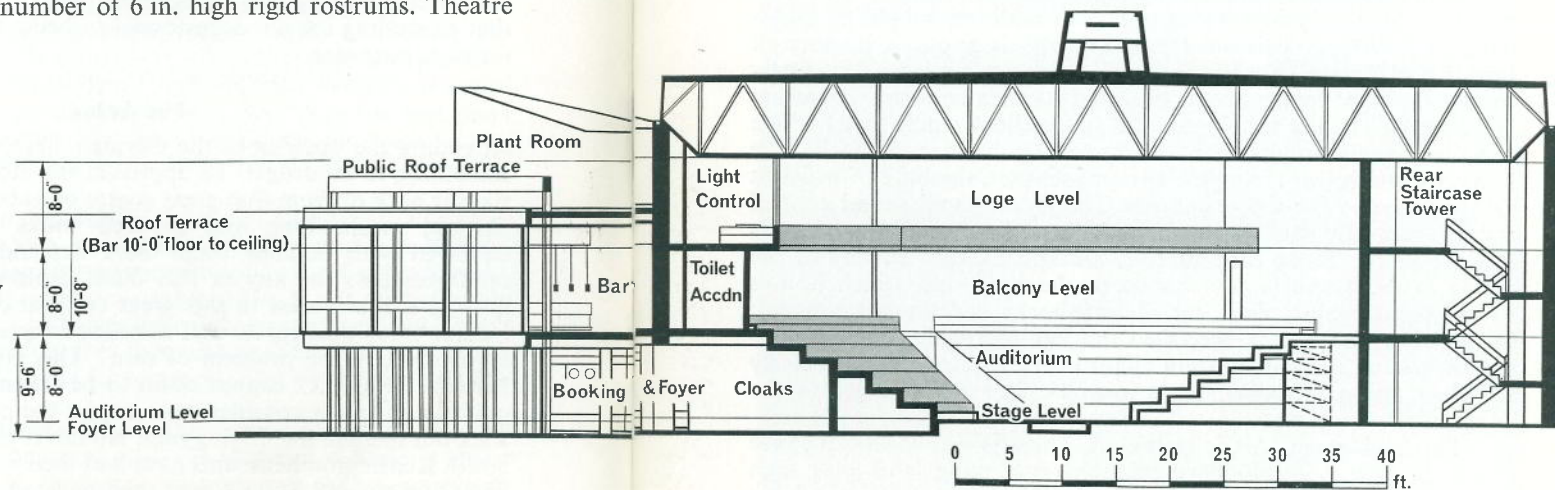
At first balcony level there are two entrances served by separate stairs from the foyer. At that level the incoming audience has an impressive view of the theatre, a view that emphasises the unity of stage and auditorium.

The end stage has a width of 54 ft. and is 23 ft. 6 in. deep. In addition a 7 ft. deep area below and above the balcony can form part of the setting. For the first two productions on the end stage (*Annie and Fanny* and *View from the Bridge*) the settings were quite extensive structures and provided many acting levels.

For thrust stage productions the acting area is 26 ft. wide and 32 ft. deep, again plus the 7 ft. balcony area if required.

In the round the stage has to be raised 1 ft. in order to reduce

Octagon Theatre, Bolton.
Architect: Geoffrey Brooks, A.R.I.B.A.
Section shows fixed seating levels shaded and retractable levels in white.





"Annie & Fanny" at the Octagon.

the relative height of the first row of seats at the request of the safety authorities. This acting area is roughly octagonal, approximately 26 ft. by 17 ft. 6 in. and has three vomitories.

Supporting the roof is a steel lattice structure which also creates a lighting grid with catwalks. In addition a lighting bar is fixed to the upper balcony front. Seventy-six spots, a mixture of Profile and Fresnel, are installed and these are moved about freely to suit each particular production and its theatre form. There are 100 lighting circuits terminating in an excellent patch panel which permits any 60 circuits to be connected to dimmer channels. The latter are controlled through a two pre-set unit, the bulk of which is rather excessive for sixty channels. The lighting and sound control room is centrally situated at second balcony level, with a producer's box adjoining. From each there is a complete view of any of the acting areas. There is easy access to the roof void which houses the air-conditioning plant, the dimmer racks and the patch panel; from this area there is access to the lighting grid. All very conveniently situated, an important factor in any theatre but particularly so when, as in this case, there must be frequent changes in the siting of the lanterns.

The back-stage area is restricted. There is no workshop space partly because it would have involved occupying land with high site-value and also to avoid additional building costs. The workshops

are in a more modest part of the town which must cause some inconvenience, with extra transport and labour costs. On the ground floor there are two rooms, each 27 ft. by 7 ft. for storage of props and scenery needed for the current production. On the first floor are the only two dressing rooms, each being 28 ft. by 7 ft. divided into separate cubicles and having shower bath and w.c. attached. Equivalent space on the second floor is occupied by wardrobe and offices.

Adjoining the theatre is a large studio which, in addition to being available for rehearsals is also equipped for instructional purposes. Courses are organised for young people and adults, for youth clubs and their leaders, for school teachers and students, for amateur dramatic societies and, in fact, for any individuals or organisations interested in any aspect of theatre. The townsfolk are given an open invitation to join in this attempt to make the theatre a focal point in the cultural and educational activities of the community.

The studio is under the control of a separate director who is closely associated with the Education Department. He has a company of four professional actors touring schools in the area. Each school visited has four sessions in each term and as the actors

"The Hostage" at the Octagon. Reflector lamps on the ceiling are for auditorium lighting.





"Pygmalion" at the Octagon. All the seating around the near half of the stage can be removed and the steps retracted.

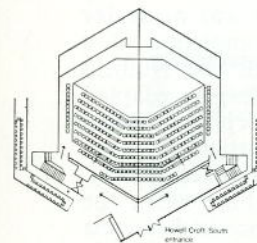
have also had teacher training they should be able to establish an effective link between theatre and school, between entertainment and education. Already the demand exceeds supply and some extension of the scheme would seem to be inevitable. Whatever may be the immediate cultural value of this activity it certainly appears to be a sound scheme of sales promotion. Audiences in the making! Incidentally, it was encouraging to note that a full house on the second night of *Pygmalion* in-the-round (an interesting use of parts of the film script with the original play) had a less than usual average of the middle-aged and elderly females: there was a nice admixture of sexes and ages. Mini-skirts were present in plenty (if that's the right word) and even the odd ambidextrous devotee of Carnaby Street could be encountered in the bar naively defying Solomon in all his glory.

The bar itself has a three-sided counter (conforming with the universal angularity) and is centrally situated in a first floor area that can cope with the concentrated demands of the thirsty section of a full house without discomfort. A rather less spacious area on the ground floor is occupied by a coffee bar which is also used by club members throughout the day for light refreshment. The entrance foyer is just about adequate for maximum demand although circulation can be a trifle complicated by box office traffic. The box office is quite close to the main entrance, very convenient for the

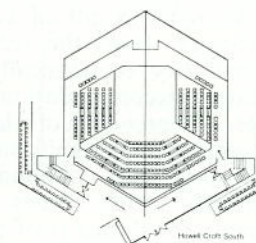
advance bookers but liable to cause congestion during those last ten minutes before the non-curtain.

This is a theatre that should be seen by all who are interested in the planning of new theatres. It is imaginative and practical in design. There has been economy in the use of materials and space but there is a general feeling of comfort and attractiveness, such vital qualities in a theatre. The total cost is about £95,000. The adaptability works because the forms of theatre designed are compatible. Each production has a run of three weeks. The change from one form to another, including the dismantling of an elaborate setting, has so far been accomplished by half a dozen men in about four hours and it is reasonable to expect that the time will be cut as the staff become more familiar with the detail of dismantling and assembly.

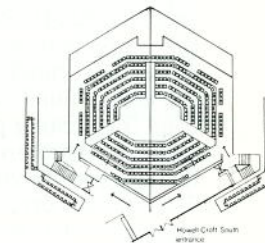
How important it may be to have the choice of the three forms of theatre is a matter for personal judgment, a judgment probably conditioned by age. My own septuagenarian view is that any one of the three forms could be an acceptable permanent arrangement of seating and acting area for any play without any loss of theatrical virtue. Each is a valid alternative to the proscenium or any other type of stage and if the adaptability had to be sacrificed or was not an actual requirement it is probable that in choosing from the three



Open End Stage



Thrust Stage



Theatre in the Round

Octagon versions the thrust stage could be a favourite, but a very good case could be argued for their end-stage. Either would give a scene designer scope for imaginative settings, elaborate or simple, realistic or stylised, bright and colourful or of that damnably drab dullness that is so much favoured by many contemporary designers.

Adaptability apart, the Octagon demands recognition and approval. The Bolton Council, their Borough Architect, their Education Committee, Pemberton-Billing and his colleagues, must all be complimented on a significant contribution to contemporary theatre. " 'Tis not in mortals to command," etc., but these people show encouraging signs of deserving. Their ultimate success will, of course, depend not on the theatre's form but on the quality of the work it houses.

SCHOOL THEATRE AND HALL WENNINGTON SCHOOL, WETHERBY, YORKSHIRE

by Norman Branson, A.R.I.B.A.

A student fortunate enough to study at the Gulbenkian Centre in the University of Hull (designed by Peter Moro and described by him in the December issue of TABS) would have had his anticipation enlivened and his imagination stimulated had he received prior preparation in a drama studio at his school.

With progression from school in mind, the requirements for initial education in drama and theatre have been met in a number of cases by simple and inexpensive structures especially designed for this purpose. A small studio has been in use at Withywood Secondary School, Bristol, for some months, and another at Wennington School, Wetherby, has been used since June 1967.

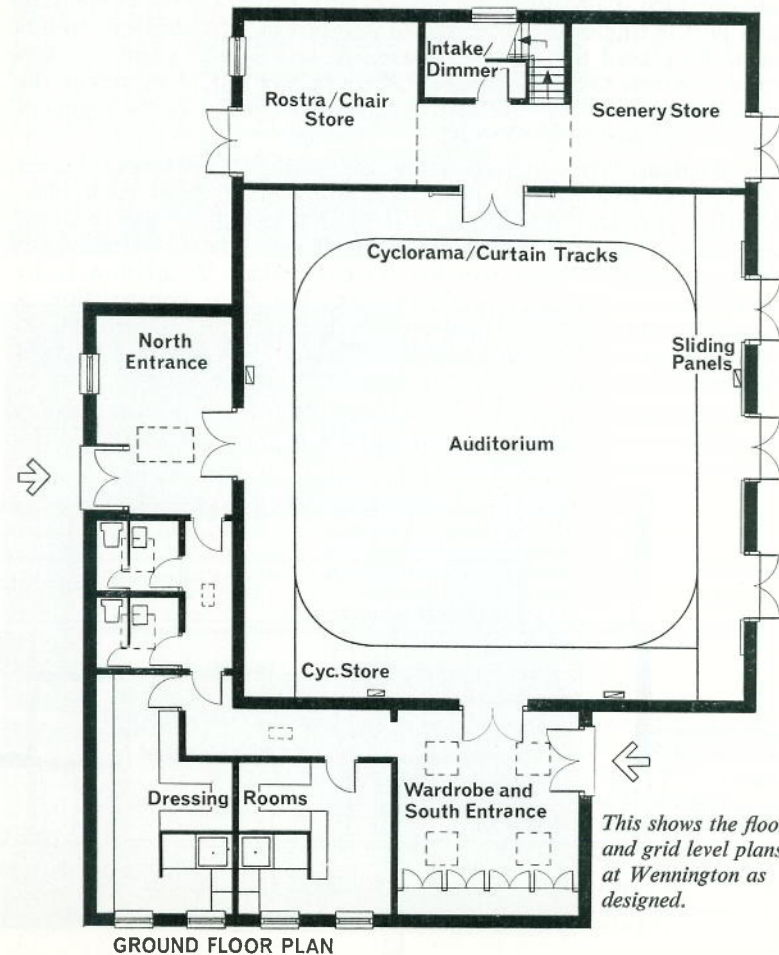
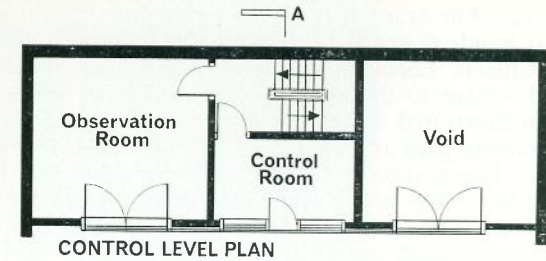
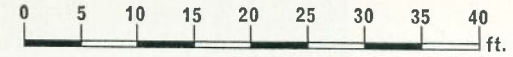
Wennington School is an independent co-educational boarding school with a current enrolment of about one hundred and thirty pupils.

The school occupies a stone mansion, its outbuildings and added huts, none of which offered accommodation for drama, assembly and other large-scale activities. The school is extremely short of funds, but an anonymous gift of £20,000 was made for the construction of a theatre. Until the recent completion of a laboratory block designed very economically, with the Nuffield project in mind, the school's accommodation was largely adapted from the existing premises. The provision of a large purpose designed space is therefore an event of real significance, particularly as a theatre can enhance the social and communal life so effectively. The design described in this article comes at a time when the provision of low cost spaces for drama is of relevance and interest to local education authorities, and is one which follows closely the recommendations in the Department of Education and Science Building Bulletin No. 30, *Designing for Drama and Music*. (HMSO).

Siting. In order to preserve the character and elevations of the stone mansion, and at the same time to ensure that the theatre would have its own individual significance, it was sited between trees on a lawn, to the east of the school. A local requirement was for a stone building, the material for which was fortunately obtained cheaply from demolished property in Bradford.

Plan. The main requirement was for a simple uninterrupted space offering various possibilities for actor/audience relationships and complete flexibility for the deployment of lighting. To support

Designed by Norman Branson, A.R.I.B.A., in collaboration with Architects and Building Branch, Department of Education and Science, and J. I. Swift, B.Sc., A.M.Inst., C.E., Estate Manager of the School.



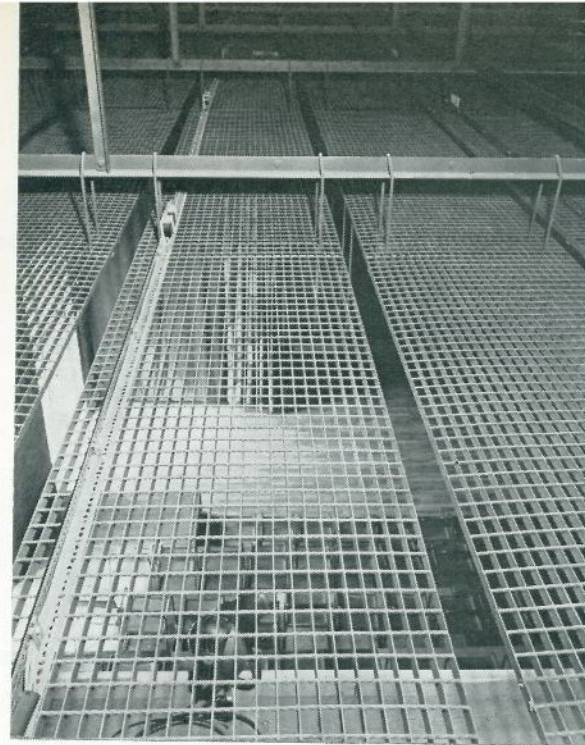
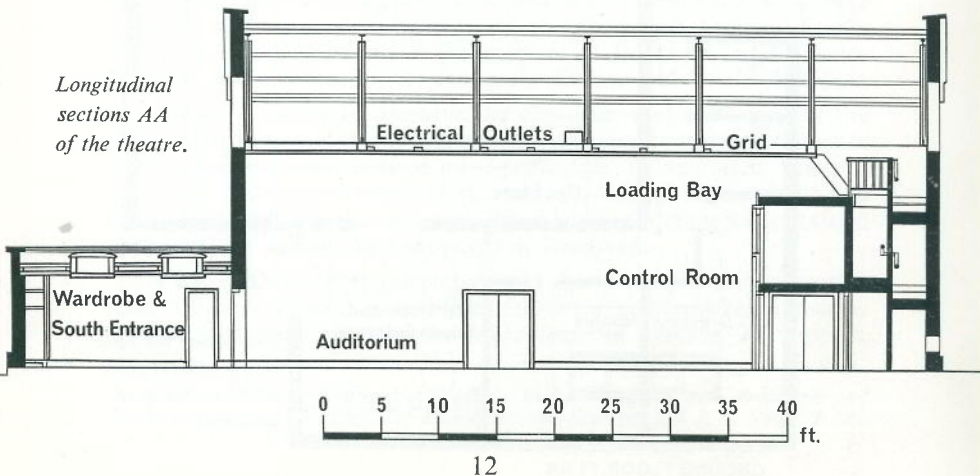
This shows the floor and grid level plans at Wennington as designed.

this was needed generous storage and control facilities, and dressing rooms. Inevitably the theatre will not be used exclusively for drama. For example it was a requirement that it should hold up to two hundred and fifty pupils for assembly to provide for possible expansion. Lectures, meetings, dances and other social occasions add further to the need for both flat floor and raked seating. The plan illustrated shows the theatre as designed—a space 44 ft. 3 in. square on plan and 18 ft. 2 in. from the floor to the underside of the grid. The perimeter folding cyclorama has not been provided so that the doors in the centre of the west wall have been replaced by two sets, one at each end of the wall. The dressing rooms have not been equipped as shown on the plan because they can—very usefully—serve also as music teaching and practice rooms.

At the east side storage, control room and access to the grid are provided. Part of the storage is double height for tall properties, and part is single height for rostra and chairs. The control room is centrally placed for lighting, sound, projection and stage management control. Over all this is a loading bay 3 ft. 4 in. below the grid giving access to it and providing storage for electrical equipment to be suspended from the grid.

Sections. The internal walls are fairfaced brickwork except above grid level where all surfaces are painted matt dark blue. Daylight is restricted to the three pairs of french doors giving access and views to the lawn on the south side. These are easily blacked out by horizontally sliding wooden screens inside. Ventilation is by large louvred openings in the gables. The floor construction is impregnated softwood battens on over site concrete supporting $\frac{7}{8}$ in. nominal maple strips secret nailed. The roof is supported by steel trusses designed also to support and give access to the grid.

Heating. Four 15 kW fan-assisted electric night store heaters are fitted in the theatre and seven $2\frac{1}{2}$ kW night store heaters in the dressing room unit.



A view of the grid from above. Vision through is much clearer when, as during performances, the area below the grid is brighter than above. When this photograph was taken not all the hardwood kerbs along the edges of the mesh had been fitted.



A view showing the proscenium arrangement made for the opening production in June 1967. The grid and some suspended lighting can be clearly seen.

The Grid and Lighting. The grid is a most important feature of the design, and besides giving complete access over the floor area, avoids the hazards, particularly for children, and limitations of catwalks, tall steps and other access devices. The suspended metal mesh grid provides a perforated "ceiling" capable of supporting live or static loads over the whole area of the theatre, and allows clear vision to the acting and seating areas below. (The space above the grid could have been 1 ft. 0 in. lower without inconvenience.) Continuous longitudinal 2 in. wide openings formed by hardwood kerbs between each 3 ft. 0 in. wide mesh panel allow lanterns and other equipment to be run along and accurately located at any position and height below the grid. All suspensions can be adjusted and controlled from the grid, thus eliminating access by ladder from below. The grid is also a mounting surface for cyclorama, curtains, properties, microphones, loudspeakers, etc.

Lighting Equipment. The lanterns purchased were limited in number to six 500-watt 6 in. Fresnel spots Pattern 123 and two 500-watt hard edge baby spots Pattern 23/S by Strand Electric, the rest of the equipment being already in the school's possession.

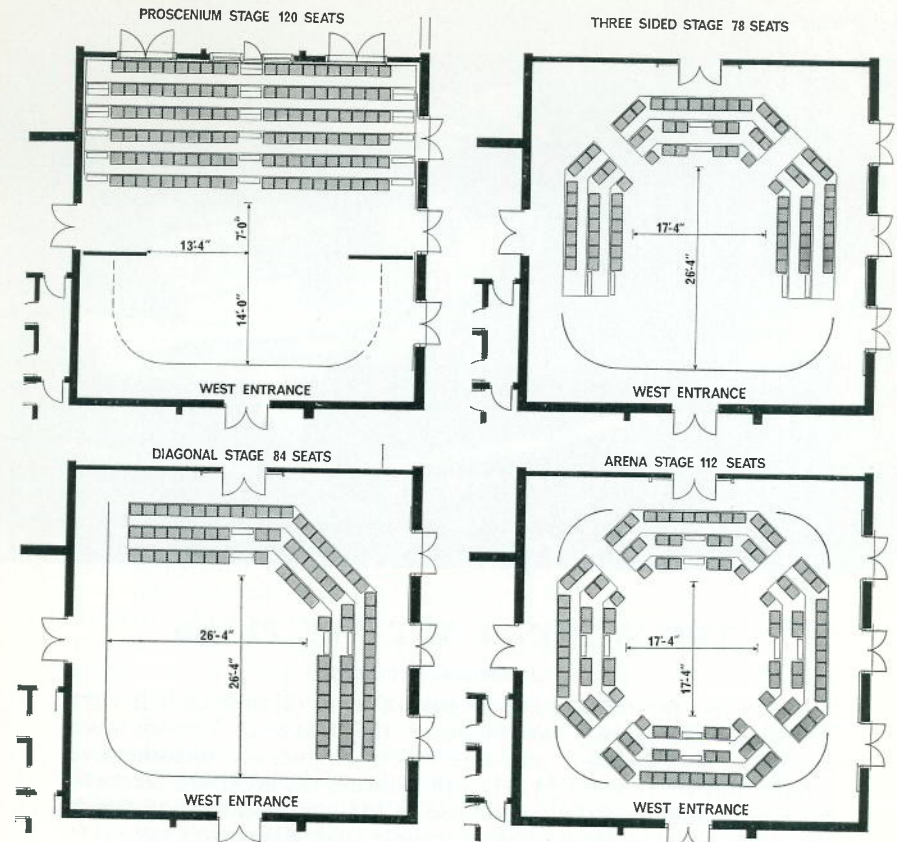
Rostra. The plans show some of the actor/audience relationships that can be made with a complement of folding rostra of the type illustrated in *Building Bulletin* No. 30, but to somewhat different dimensions. The school, however, decided to construct in their own workshop, stepped seating for the opening production. It is hoped that this will be remade on the basis illustrated here in order that the full flexibility for which the theatre was designed can be achieved. The schedule of rostra proposed is as follows:

Eight types were designed of the following dimensions:

Type A	5' 3" × 3' 0" × 1' 0" high	Rectangular
" B	5' 3" × 3' 0" × 1' 6" "	"
" C	5' 3" × 3' 0" × 2' 0" "	"
" D	5' 3" × 3' 0" × 3' 0" "	"
" E	4' 0"/2' 9" × 3' 0" × 1' 0" high	Angle R.H.
" F	4' 0"/2' 9" × 3' 0" × 1' 0" "	" L.H.
" G	5' 3"/4' 0" × 3' 0" × 2' 0" "	" R.H.
" H	5' 3"/4' 0" × 3' 0" × 2' 0" "	" L.H.

Arrangements for various uses:

	A	B	C	D	E	F	G	H	Total
Arena	4	—	4	—	8	8	8	8	40
3 sided	3	—	3	—	10	10	4	4	34
Diagonal	3	—	1	—	6	6	6	6	28
Prosc.	10	8	—	24	10	8	8	8	76

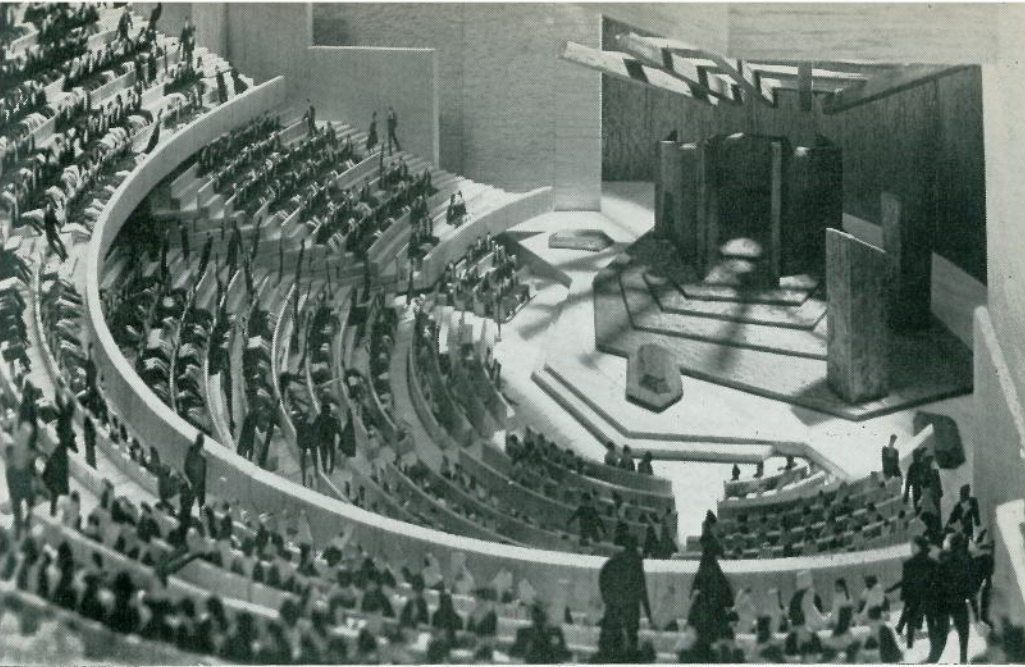


Plans showing various actor/audience relationships made possible by folding rostra on a flat floor.

Cost. The theatre was built and equipped for the total sum of £23,445. Included in this figure are the following items.

- Sandstone from demolished premises £535
- Grid £1,368
- Stage lighting and equipment
 - Grid circuits and other wiring £221
 - Control panel and distribution board made by school £107
- Curtain track £130
- Curtains at special price £372
- Non-folding chair rostra made by school £363
- Tubular steel framed stacking chairs purchased at an auction sale (175) £127

It should be noted that had a full complement of lighting equipment been installed with a 20-way preset single phase control and 20 500-watt lanterns, the cost would have been £1,460. Folding stepped seating rostra as indicated on the drawings would have cost £1,020.



THE NATIONAL THEATRE PLANS

by Frederick Bentham

Just too late for the December issue of TABS (almost as if it were deliberate avoidance!) the plans of the National Theatre were issued to an expectant and one might almost say apprehensive public. But all is well; Mr. Denys Lasdun, the architect, seems to have been able to make good sense of the confused briefing which must have resulted from so many people having had their say.

Here *at last* are plans to which three theatres can be built—each of which makes practical sense in the terms of what it is attempting to do. They also appear to be reasonably exciting architecturally inside; externally, according to my architect friends (yes, I have some!) brilliantly successful and yet not at the expense of the interior, *vide* Sydney Opera. The job is now to get on and build.

The words “at last” are unfair to Mr. Lasdun who since he was appointed has had to obtain a brief and has had in fact to design two schemes on two different sites (the first included an opera house). The “at last” does not apply to him but to the delay and a certain infirmity of purpose at every point, including even the selection of the architect himself. Had some individual in high places wanted this theatre and known what he wanted as much as the L.C.C. concert hall faction did in 1948 then by now it would have been built. In a scale of priorities within tight purse strings did a second great and expensive concert hall (the Queen Elizabeth

Hall) really come before at least the first instalment of the National Theatre?

It could be said that the moment Stafford Cripps established the principle of Government finance for a National Theatre in 1949 by earmarking a contribution of £1,000,000, the way was at last open for a theatre building. This statement was there to be seized as an opportunity on which to build or like many a government offer to be reduced to mere rhetoric—a when-times-are-better promise. In the event the National Theatre became committee bound and especially enormous committees ensured that both the escape velocity needed to go into orbit became so much the greater and the powers of any individual to fire the process so much the less.

A committee, especially a nice large one, was just what the Government needed, for this was bound to postpone the day of reckoning—the day when some real money was to be paid out. Thus while palatial concert halls were built on the South Bank and even partially pulled down and extended with great expenditure of treasure, nothing whatever happened about even one theatre. Scandal of scandals, 1964, the quater-centenary of Shakespeare's birth, was allowed to pass without even a modest interim structure, like that of the A.N.T.A., Washington Square, appearing, although we had by then a company to play there.

Why was all this? It is simply not true that money was not available. It is inconceivable that over this period of time it could not have been got from somewhere. There was quite a lot of money spent on the Shakespeare exhibition for example. Nor does any real excuse lie in the lack of time to plan. There have been several examples of good lightning planning. What seems to have bedevilled the National Theatre building is that no-one seemed to know what to plan. This—the brief—appears to us outsiders to have taken an interminable time. Leave aside all the pre-war (two world wars in fact) inertia since 1910 via Kensington and consider only post Cripps 1949. We are still talking about nineteen years, or seventeen since the laying (re-laying?) of the foundation stone, to reach the initial plans; and there is still eighteen months of detailed planning to follow. What has been happening all that time? Firstly as said earlier, Mr. Lasdun was not there for most of it. Secondly neither was I, so it is guesswork on my part.

I imagine there was the split, Commercial *v.* State theatre. There is still some muttering over this. The next question was Where? Why should London have it? Should not the jam be spread and provincial cities benefit? Then there were the anti-edificites. The notion of a building spells a jail to them and the repellent discipline of having to have a good think as to what they want. The identification of a building with a prison was probably supported as that token of “new Brutalism”, the Queen Elizabeth Hall took shape. Entwined with all was a strong distrust of architects. The architect is to theatre people the source of all ills. Power drunk he pursues but two aims, a building which photographs well for the archi-

tectural press and secondly an enduring and irremovable monument for future generations to remember him by. The affair down under has not helped the image in this respect.

More than all these, I imagine the biggest delay has had its origin in the question of the form the auditorium and stage were to take. The National Theatre Company in the sense of the players took the stage in October 1963 at the height of the open stage clamour. The Mermaid in London had been followed by the first season of the Festival Theatre, Chichester, and although something was not quite right with that place (the architect again, of course!) it had made a great impression. Proscenium was dead, new forms of theatre were in. But what form? Thrust, end stage, space stage, transverse stage, in-the-round? Then, if these were not enough to muddy the waters to fish in for a clear brief, the advocates of a Fluid-Thespio-Ambience ensured unfathomable depths. They were still doing so in the Montreal Colloquium last year. Never was there a worse time to attack the problem of designing a theatre. No wonder the building of concert halls was so popular; especially when it was possible to deny, not that it was ever true, that they will ever be used for any other purpose. Even an opera house is a piece of cake since the musical form imposes its own disciplines—always providing you do not design it outside-in.

No wonder, as the German theatre exhibition has just shown us, that country was able to build many theatres vying with our National Theatre for size and cost while we were only thinking about it. Their theatres, whether straight or musical, are almost invariably to the opera-house format.

All this is past history now, so let us examine what Mr. Lasdun, the architect, puts before us. The first thing which strikes me is that there has been some decided pulling up of socks since the move down river of Waterloo Bridge. The Shell Centre as a backcloth probably weighed too much on Mr. Lasdun's mind in the case of the previous opera house-cum-theatre site. Most of the thought was in the exterior with only the most loose indications of the auditorium forms. This time equal interest lies in the project—inside and out. Since TABS is primarily a stage and auditorium journal there is now some meat to get our teeth into.

As is by now well known there are three theatres; the open stage with 1,165 seats, the proscenium with 895 seats, and the adaptable studio with 200 or so depending on form. Although these theatres individually have only medium-sized seating capacities, together they offer 2,260 excellent seats per night for the National Theatre compared with the 878 (majority poor, and a not inconsiderable number downright rotten) in its present home.

There are plenty of precedents to ensure that in a studio with 200 seats, complete adaptability presents no difficulty. The room is to be approximately 60 ft. square and is described as having a gallery on three sides "8 ft. above stage level beneath which actors can circulate to stage entrances between banks of seating". Audience

access is from a small entrance foyer to the gallery level. The seating is, of course, in movable units and "there is a small backstage area on the fourth side of the room". This latter means that end stage forms can receive better treatment than when in the name of adaptability it is claimed that they must be capable of being positioned at any compass point.

The proscenium auditorium appears at first sight rather pedestrian on plan, but it is obviously in an early stage of development. There is, of course, a certain logic in a somewhat tame approach here where in fact there are three auditoriums to play with (and in!). There is one balcony and the stalls run under it to the depth of half a dozen rows or so. The lighting control and allied rooms are at the back of the stalls. There is no fan to the auditorium, the effect with the adjustable proscenium in the wide position being literally the theatre of confrontation, all being seen from every seat in plan and with the proscenium border high, much the same no doubt applies vertically.

The open stage auditorium does fan out but to a very much smaller degree than was the case of the theatre which may be said to have started (revived?) the fashion—Stratford, Ontario. Thrust and a large degree of encompassment have taken a back step both on the South Bank and in the Royal Shakespeare's Barbican scheme. This accounts for the limitation of the seats in this form to 1,165.

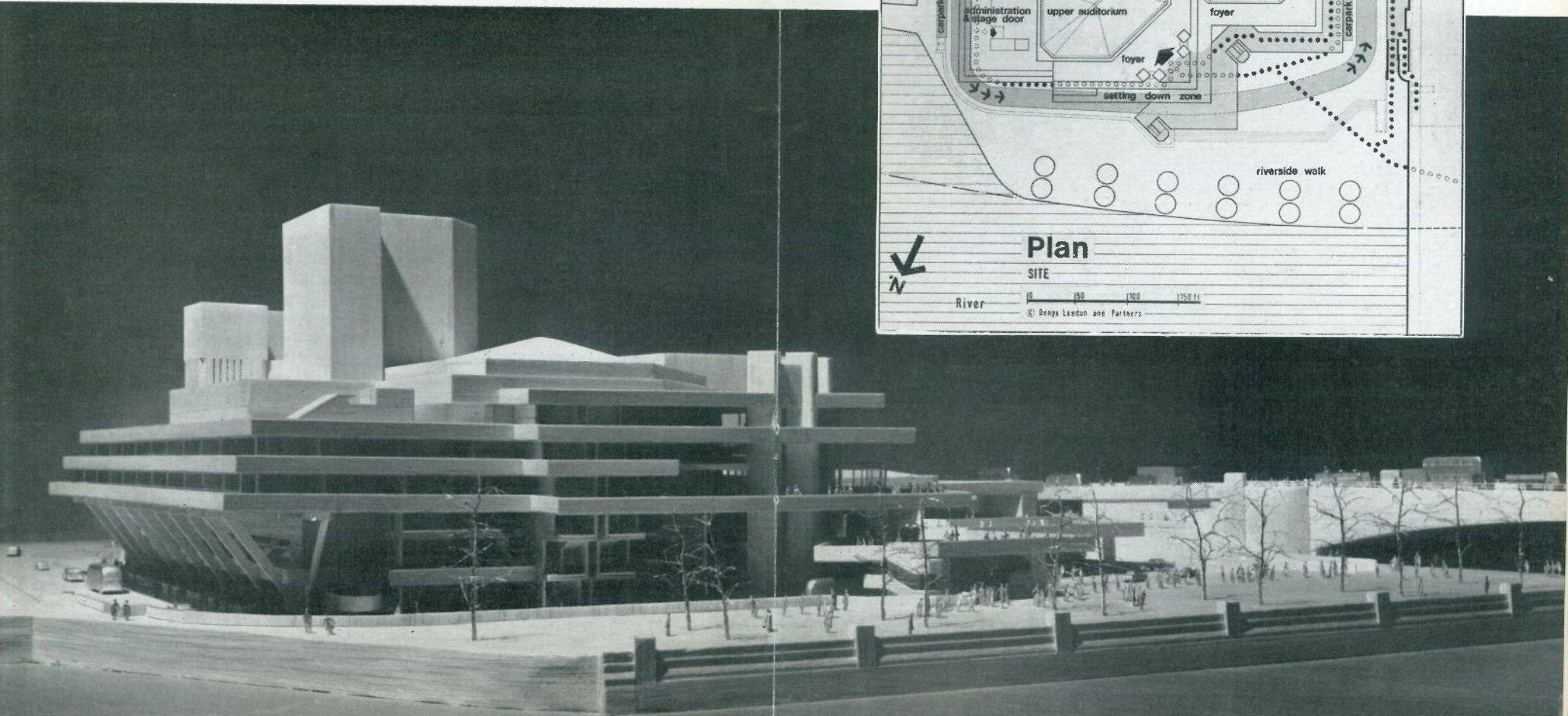
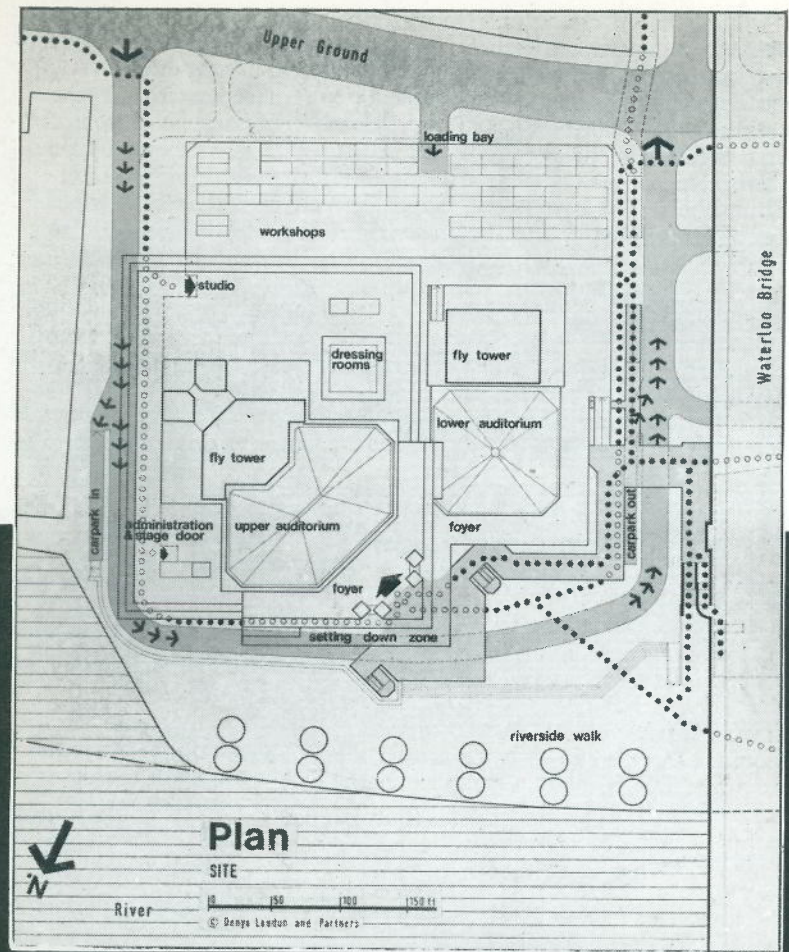
Mr. Lasdun in a radio interview described this auditorium as "bowl-shaped" and it is important to stress this as neither the plan or the photograph of the model really manage to convey it. It does become apparent when actually looking at the model. First of all the auditorium is not a single floor, rather it takes a stadium form in section so that there is a front row of circle seats though there is no circle. Secondly the two centre seating blocks between it and the stage are lower, although well stepped so that members of the audience can enter centre, halfway up the auditorium so to speak, from under the balcony front. It is a balcony virtually without overhang and it is under here that the lighting control room, etc., is placed—an excellent position. The very large room at the rear of the auditorium prominent on plan is for projection and other lighting equipment.

The side blocks of seats are higher than the centre stalls but are nevertheless lower than the main block of rear seating. They are quite separate entities and do not, as a quick glance suggests, join on to the great sweep of the seven rows of rear seats. In point of fact the four rows of seats immediately in front of the stage also sweep right across from side to side and it becomes apparent that the side blocks have a terrace relationship to these first four rows, indeed the fronts continue to each side in such a way as to overhang the sides of the stage. As access to these side blocks takes the form of a wide gangway on the wall side, the stage is embraced by the auditorium architecture rather than by a few token members of the audience stuck out with a poor view at the extreme sides.

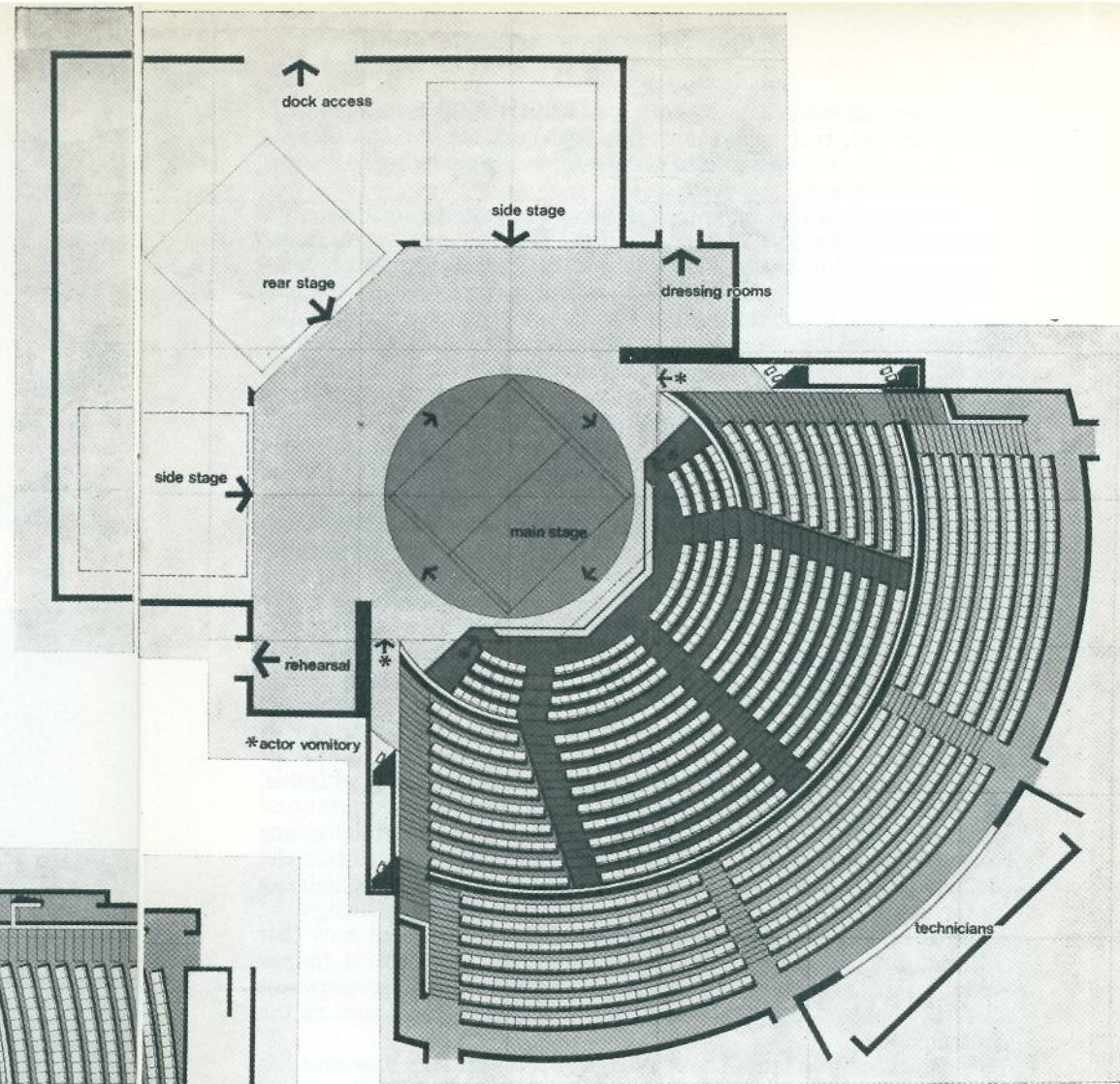
Speaking personally I am all impatient to see this auditorium for its terraced levels provide an exciting escape from the single unrelieved sweep often put forward. Over a thousand unbroken faces suggests part of a football stadium rather than a theatre. Here, however, the actor will see and command one audience but bestowed in relation to him as excitingly as he and the show in which he is playing should be to them.

The stage of the open auditorium is said to be able to be modified in its front areas, but the arrangement shown in plan and model is obviously the one that best suits this conformation of seating. This is no thrust stage of the Ontario and Minneapolis type or even our own Questors form. One valuable piece of flexibility in this very front area is provided by the fact that the seating blocks can be moved, in particular outwards to provide openings for actors exiting towards and under rather than among the audience.

Turning to the stage of the open theatre, it is hoped not to have a fire curtain and it is certainly difficult to see what it would

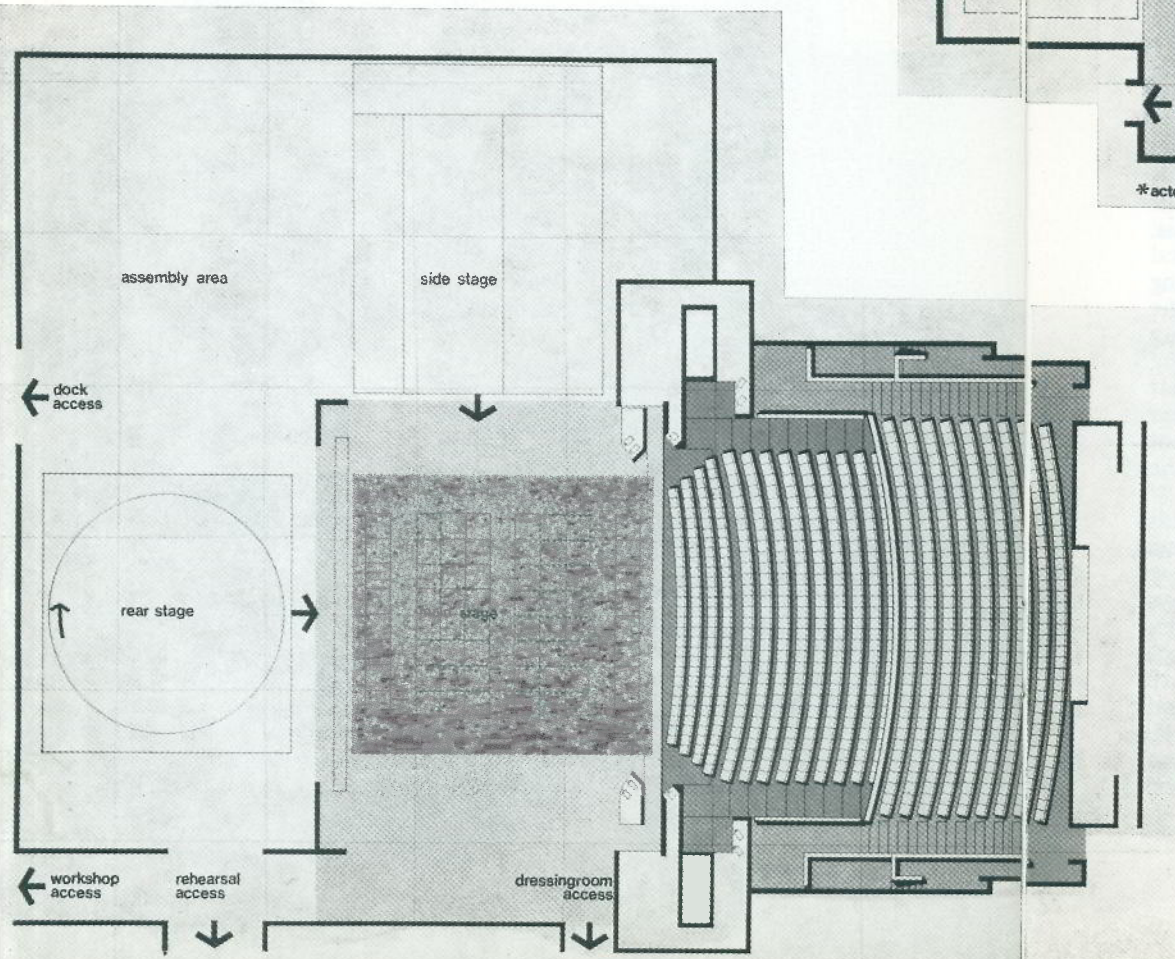


seal off to when dropped in. The width between the two prominent projecting walls (which vaguely suggest on plan a proscenium, but which are in fact half way up the active stage area and indeed may often constitute the main scenic line) is 56 ft. Needless to say, the stage floor itself can be opened up whenever necessary. What is of special interest is the proposal to use short B.B.C. television type motorised bars over the stage area instead of the usual long counter-weighted bars. The overall full height grid covers the encompassed (or projecting) part of the stage as well as the main stage. Both in the open stage house and in the proscenium house there are wagon stages to roll on built sets. No doubt the prime aim of these is to facilitate change of production as necessitated by playing in repertoire and/or by rehearsals. Very often a stage has been in use all day for lighting and other rehearsals which require the use of the full scenery and the problem arises of replacing this quickly by tonight's production. It is essential that machinery for this purpose should not take half bites at it. Machinery is to replace labour and



LOWER THEATRE (proscenium stage)

0 24 48 ft.
© Denys Lasdun and Partners



UPPER THEATRE (open stage)

0 24 48 ft.
© Denys Lasdun and Partners

to find oneself using lots of both, as is likely in at least one well-known project, is to miss the target. Such machinery being there it can, of course, be pressed into service for scene changing in a show if circumstances warrant it.

The proscenium stage makes use of a sensible idea which I hope will not be lost in the detailing. The full number of seats remains at all times and any provision of forestage takes place as part of the stage itself. In other words, a forestage is created, brought into being by using the false proscenium technique and not by taking away front stalls and raising a lift. This is, of course, possible in this case because the stage is deep enough not to be cramped by so doing. Personally I have never liked the pretence of a thrust stage at the Aldwych and the forestage at the Royal Court both of which have bent the already strained sight lines beyond endurance. I commend the fixed seating idea even to those theatres where an orchestra pit may be required at times. The original house of what is now the Frankfurt theatre complex, the one which has the enormous revolve, converts from drama to opera by opening up the downstage floor area to form the orchestra pit and the same happens at Gelsenkirchen. In the National proscenium plan the fire curtain is to drop at the front edge of the stage at much the same point as the festoon house tabs operate in their makeshift home at the Old Vic. Upstage of this a German style tower and bridge structure is indicated which will provide the adjustable frame (52 ft. to 32 ft.) to the stage and constitute, when wanted, a proscenium.

What of lighting? TABS has, after all, some connection with this. Richard Pilbrow, who is responsible as consultant, is in an unusual position for a consultant because he has been "doing" the lighting for the National productions and is of an age that whatever the delays that may yet befall he can see himself "doing" the lighting in the new building. I did not bother to discuss with him the lighting control because the principal problems have been solved now that instant dimmer memory is an accomplished fact and is indeed bidding fair to become a common fact. The real field for development lies in what we know as the lanterns and the Americans as the instruments.

Stage lighting lanterns seem to defy progress in a way that has never been the case with dimmers and lighting control. This stems from the fact that all the basic optical systems were arrived at very early on. Lamps have, it is true, become very compact these days but watts remain obstinately watts, i.e. heat. Even the latest tungsten halogen (quartz) lamps cannot be said to represent much advance in this respect; what they bring is maintenance of performance through life. To get real efficiency we have to go low voltage and transformers then take their toll in weight. A new source like the mercury iodide lamp at 90 lumens per watt breaks the bondage of 20 or so to which we have been confined but requires mechanical shutter dimming.

It is the mechanical element in the case of lanterns that is the most intractable. To direct the beam, colour, and adjust their shape and size means physical movement. As a servo mechanism this becomes complex and this shows in the extreme form with Patt. 264 Bifocal spot with its eight separately adjustable shutters. However, Richard Pilbrow believes servo elaboration may justify itself in resetting for a production. It is not the time taken in lighting the original production that worries him but rather the resetting when in repertoire. Given a servo with sufficient mechanical finesse there is no difficulty in automatically memorising its state and re-instructing it. An alternative technique accounts for the 800 lighting circuits of the Vivian Beaumont theatre in New York.

Whatever the lanterns, adequate access will be necessary—if only to maintain and re-lamp them. In the proscenium theatre this is mainly a matter of a number of bridges across the ceiling and their corresponding side wall slots. For the open stage the wide fan of the audience makes a more elaborate arrangement necessary to get all the positions the variety of lighting angles dictate. Thus in this auditorium Mr. Pilbrow is working on a series of intersecting access ways which will be masked by a ceiling of floating panels nowadays generally referred to as architectural "clouds".

The trouble with National Theatre stage lighting is that strictly speaking one cannot accept the limitations that lesser repertoire houses have to, indeed should, adopt. Assuming as an argument that the elaborate bespoke setup for lighting, which is common in the long run West End, represents the ultimate then the National has to be able to do the same but in repertoire.

There is some time yet before these problems become pressing but once the place is opened it will not be unreasonable to try to imagine its golden jubilee. What will be the lighting developments of those fifty years out into the space age?

NEWPORT LITTLE THEATRE

by Martin Carr

The newly opened Little Theatre at Newport (Monmouthshire) represents a departure from the usual politics of theatre construction, for here we have a fine 410-seat theatre, designed and equipped to virtually full professional standards, which is owned by the Trustees of the Newport Playgoers Society—an amateur theatrical organisation.

A glance at the plans will show that many professional repertory companies would gladly exchange their present facilities for the comparative luxury of Newport and who could blame them for being envious. This history is of interest as it shows the possibilities that are open to any theatre owner if his building happens to be in "the right place".

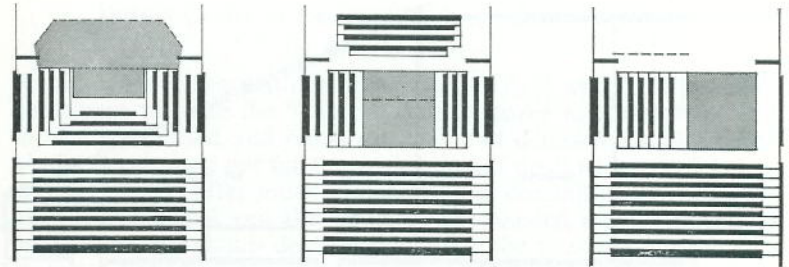


The Newport Little Theatre.



The Society previously owned a small theatre in a somewhat derelict area behind the main shopping centre of the town. By a stroke of good fortune this site happened to fall bang in the middle of a vast commercial development of shops, offices, supermarkets and so on, proposed by a leading property company as a massive extension to the shopping centre of Newport. The result is obvious. Replace the theatre or no development.

The developer has indeed done the theatre group proud and so has the architect. Internal finishes are simple and cheap, but the theatre has a full fly tower, orchestra pit with a lift, 60-way remote control preset lighting console, a full complement of lanterns, and workshops, property stores, wardrobe room, rehearsal room of full stage area, and a caretaker's flat to boot. The public are well served with generous foyers, the rake of the seating is perhaps the steepest that I have come across, and the theatre management has its offices, and a full set of film projection equipment to fill in the idle days.

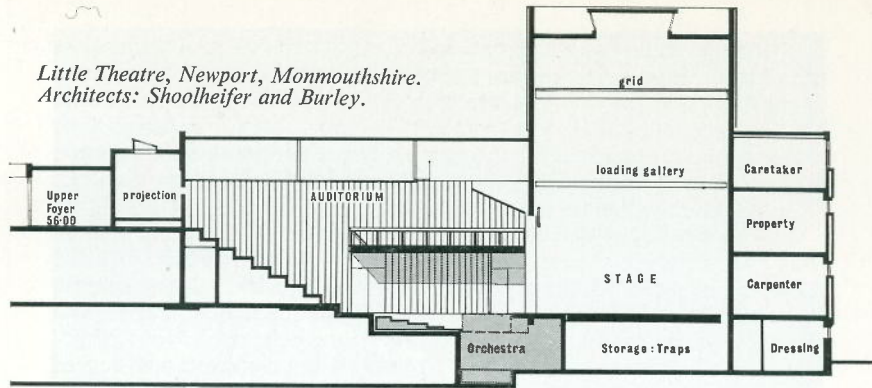


Alternative stage arrangements at Newport Little Theatre.

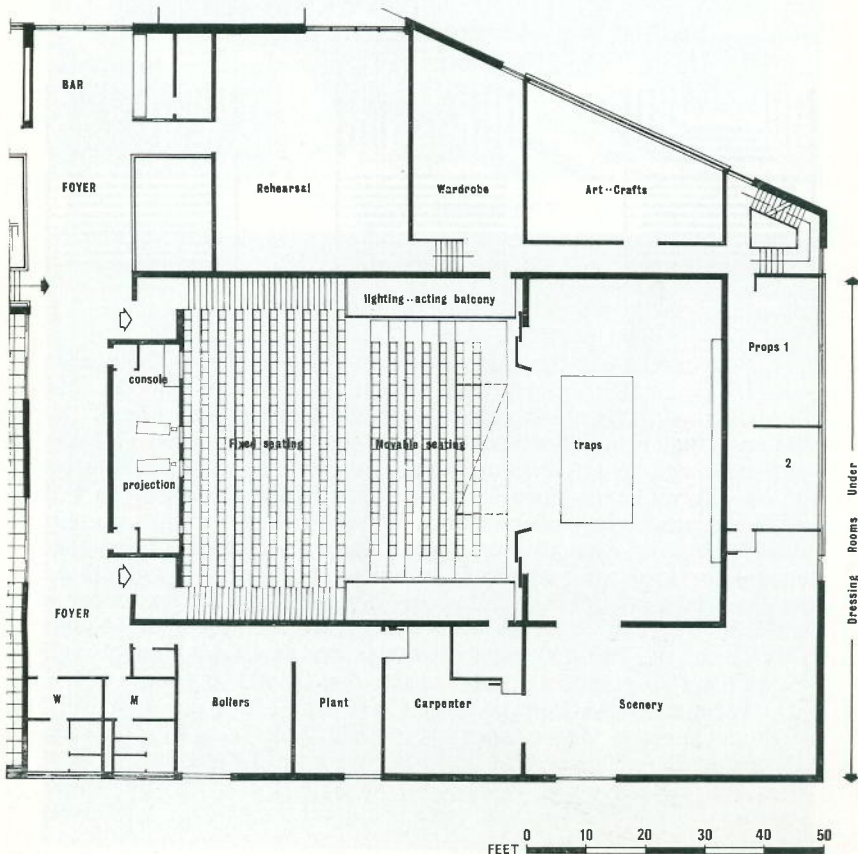
And herein lies the main question—how will this theatre be used? The amateur society will mount its own productions, and the British Film Institute has co-operated to make this one of the first regional Film Theatres. But the theatre is too good and too well equipped to remain empty, and one therefore hopes that its doors will frequently open for the general public of Newport as well as to the privileged club members. It is thus all the more of a pity that the seating capacity may be inadequate for some professional groups for whom the stage and technical facilities would otherwise be ideal. However, there is obviously a great future for professional touring organisations that can tailor their productions to suit theatres in the 350–450 capacity range, but few such theatres will be built on as generous a scale as this one (£190,000 complete).

Technically the stage is large (55 ft. by 32 ft. deep) with 16 ft. high proscenium whose opening is adjustable in width between 28 ft. and 38 ft. The grid at 36 ft. is barely full height, but at least it is there. Wing space is tight on Stage Right at the full width opening but on Prompt Side there is a good scene dock with street access.

*Little Theatre, Newport, Monmouthshire.
Architects: Shoolheifer and Burley.*



Plan at upper auditorium level.



The auditorium may seem a little cold, and the rectangular shape probably contributes to this. The front seven rows of seats are removable or adjustable in plan, and various arrangements of apron staging are possible—all with manual labour however. Juliet balconies are available on both sides of the house, but one wonders a little about their practical value, as one must also do of the so-called “adaptable” staging.

The control room is fine and there are well-placed catwalks in the ceiling for normal F.O.H. lighting. However, this is all at a high angle, and one could have wished for a second bridge over the middle of the auditorium to provide a flatter “fill in” angle and also to cover correctly the fully extended apron. Perhaps at a professional level one could wish for a Strand SP control in place of the JP now installed, but in most respects this is a theatre to delight the technician, be he amateur or professional.

TOYNBEE THEATRE

Drama Centre of the Inner London Education Service

*by Donald Walker**

When, in 1958, negotiations between the L.C.C. and the University Settlement to lease the Toynbee Theatre came to a deadlock, the theatre was closed and remained dark and deserted for five years. Many voices cried out for the re-opening of this lost amateur venue and eventually, after much discussion and committee work, agreement was reached and the building was handed over. The toll of moth, dust and damp deterioration after the five-year closure was excessive and the L.C.C. had a phenomenal bill to pay for making the building habitable again and restoring the basic decoration and furnishing. There were no funds available for renewal of stage equipment or structural alterations so the theatre re-opened rather quietly in April 1964 and even the Editor of TABS was kept somewhat in the dark about what was going on. Not that the new management wanted to be secretive or to shun publicity: it was simply felt that the time was not ripe to publish the story of Toynbee and its new role as a Drama Centre until a little more adaptation had been done and more was on the drawing board.

In what way then, does Toynbee Theatre differ from any other theatre available for hire by amateur companies? The attractively plain programme cover explains in a nutshell—the theatre is maintained . . . etc. Moreover, any drama group from a school, college, A.E. Institute, Youth Organization affiliated to the I.L.E.A. have no rent to pay. The use of the facilities as an aid to their deeper study of theatre is all part of their course of education and is quite free together with the help, advice and active participation of a fully professional management team who instruct in all backstage techniques of stage designing, model building, scene painting, stage

**Manager of the Toynbee Theatre.*

carpentry, sound recording, lighting and, most of all, stage management.

The proscenium stage is flat and the comfortable auditorium, seating 394, is carefully planned with regard to the sight lines. The gentle rake of the single level ensures every seat of a good and reasonably close view of the action. The auditorium "embraces" the stage—the walls come in to join the proscenium. These curves still display a pair of murals, the work of the late Clive Gardiner (and considered by some to be his greatest work). Whatever their artistic value, which is debatable, there is no doubt that their positioning was ill-conceived and their substance quite unsuitable for their situation, being heavy classical interpretations on the theme of comedy and tragedy. Efforts to have them suitably veiled have so far been unsuccessful, but a benefactor may shortly provide the wherewithal for this.

An apron stage projects some five feet beyond the proscenium and the height of this has recently been raised to match that of the stage, forming a far more useful acting area without the hazard of the previous 5 in. step. The proscenium opening is 29 ft. 6 in. and 13 ft. high (the great disadvantage of the entire theatre is this lack of height). The depth of stage is 23 ft. to the plastered back-wall, mistakenly but affectionately known as the cyclorama and any passage behind this must be accomplished either out of doors or underneath. Wall to wall backstage is 50 ft. but the lighting gantry on the prompt side and the sound gantry on the other reduce this effectively to 43 ft.

Toynbee Theatre. Architect: Alister MacDonal, F.R.I.B.A.



Toynbee Theatre from the stage.

There is no fly tower: The ceiling of the stage area is only 16 ft. above stage level. It is hoped, that, one day, by a rearrangement of cloakroom accommodation on the first floor serving the classrooms, the ceiling could be raised by some 12 ft., thereby allowing for the installation of a grid at about 28 ft. and the conversion of the prompt side gantry to a fly rail. The architecture of the building is such that no wing space can be gained on the prompt side, but on the O.P. side, the removal of the pass door to a down-stage position could allow for the demolition of the O.P. gantry and the steps which lead from the present pass door. This will give greatly needed space large enough to accommodate maybe a sizeable truck or other scenery whilst not in use.

There is no requirement for a safety curtain but, by the same token all drapes must meet the fire prevention regulations, and the amount of scenery is strictly limited to 1,500 sq. ft. by licence. The stage is provided with a full set of black wool drapes including three traverse curtains as a neutral surround when required and all can be easily lowered in on winch or lines—though not flown.

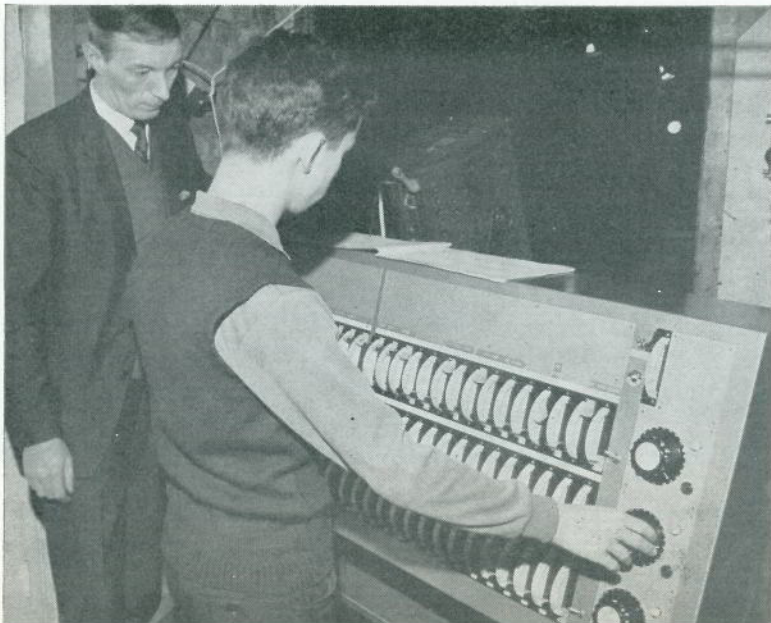
Very nearly all the lighting equipment has been replaced during the past three years. The Strand grand master board, built in 1938, was succeeded last year by a J.P. 3-preset thyristor control. Only 40 ways are yet in action but it is hoped to add the third dimmer rack quite soon. The desk is still situated on the old bridge (prompt side) and only a limited view of the stage is possible, if at all with

some settings. The next major improvement, however, will be a front of house control room, envisaged as a "blip" on the rear of the auditorium and incorporating a lighting control on the right, projection room in the centre and sound control on the left. A further facility will be the dual purpose design of the projection room to serve as a sound studio, giving a self-contained sound recording unit which can be used concurrently with some other activity such as, for instance, a lighting rehearsal.

The sound equipment, housed presently on the O.P. gantry but due to move to the new control room eventually, consists of the Lenco G.L. 70 double turntable transcription unit, Vortexion tape recorder, and amplifiers which also carry the dressing room call and relay system and mixer unit, feeding three speaker channels back stage and front of house.

The covers on the apron stage lift off to reveal a large orchestra pit. Parts only can also be removed to make an entrance. The pit is deep and constructed on a mini-Wagnerian style, whereby (the musicians being mostly below the actual stage) a blend of instrumentation is achieved and, in opera or musical, the voice comes *with* the music instead of trying to sing *over* it, a great advantage for an inexperienced singer.

Under the auditorium is a vitally useful area, once a prop-room and store for furniture, but now serving as a workshop and paint shop. Access to this area for larger pieces of scenery was once impossible, but, by the cutting of a slot in the upper wall of the workshop, it is now possible to slide any piece up to 6 ft. wide up through the orchestra pit at an angle of 45° and over the front of the stage; the management claim this as the only "scenic vomitory" in the world.



The dressing rooms are five in number and can accommodate a company of 50 with reasonable comfort. The fittings border on the luxurious and are modelled to the same design as those of the Jeannetta Cochrane Theatre. All have easy access to the stage, three being below the stage and two alongside. A small room for the stage manager is also provided at stage level to act as prop room for visiting companies.

If the management are to be of any real practical assistance, it is plainly necessary that they should have seen at least one complete rehearsal before the production comes in. This can seldom be accomplished on the stage due to the weight of bookings but the studio on the first floor measuring 50 ft. by 24 ft. serves well as a rehearsal room, allowing the acting area to be marked out accurately. This pleasant room serves many purposes. There are at least two exhibitions mounted here each year, open to school parties during the day, when the manager will conduct a tour, explaining the background and playing a taped accompaniment to the subject in terms of contemporary comment, excerpts from the plays of any particular period, music and social history. Meetings, lectures, receptions and auditions for major county awards are other regular activities. The acquisition of a junior control prompted the erection of a hanging scaffold for lanterns and despite the low ceiling, some very successful productions have been staged (end stage, arena and in-the-round).

The Saturday morning Junior Theatre Club (age 7-13) meet in here and in other classrooms, and other drama classes for teenagers are held on Friday evenings and Saturday afternoons.

The building is buzzing with dramatic activity 13 hours a day, seven days a week. Were there more accommodation, particularly at week-ends, the groups would be ready to move in. All of which augurs well for the future network of similar drama centres envisaged for the Greater London Area.



Rigoletto
at Sadler's Wells
Opera

We are conscious in TABS that we do not describe often enough the process of lighting in connection with specific example rather than general principle. The difficulty lies mainly in the problem of photographing the lighting effects. The camera without the use of colour does not take kindly to the range of contrast presented. Then again with the long exposures needed it is impossible to photograph during the performance and to get the cast in just for the photograph is equally out of the question. Photo-calls are not the same thing at all. So it is that one is deprived of the lighting's principal target—the cast.

Stirred by press notices of Charles Bristow's lighting of Michael Geliot's production of *Rigoletto* we decided we must have a go and in consequence descended on Sadler's Wells with our cameras and asked Mr. Bristow to write us an article. Their stage, just now very much in the news due to their wish to move to the London Coliseum, is so small that it enforces a basic simplification of lighting and setting alike. This from our point of view makes it easier to explain what has been done. Most professional productions, as the discussions on a "Multi-lantern complexity" have shown, are far too difficult even to attempt to reproduce just the layout in these small pages.

The settings for *Rigoletto* are by Annena Stubbs and are essentially simple consisting in the main of three walls of painted canvas hanging up and down stage, left, right and across the back. The fact that the proscenium opening is 29 ft. 6 in. and the distance between the fly rails 38 ft. 6 in. and the clear depth from setting line only 26 ft. means that one cannot allow the set to poach much of the stage space in scenes where a large cast has to be present. The painted wall treatment for this show is very cunning, suggesting solidity yet giving rein to the imagination to blend it with the various built pieces that are inserted for the different scenes. It is also necessary to remark that Mr. Bristow is exceptionally successful in coping with that perennial problem of opera, murk and dark. The atmosphere is always right yet one can see the characters.

LIGHTING RIGOLETTO

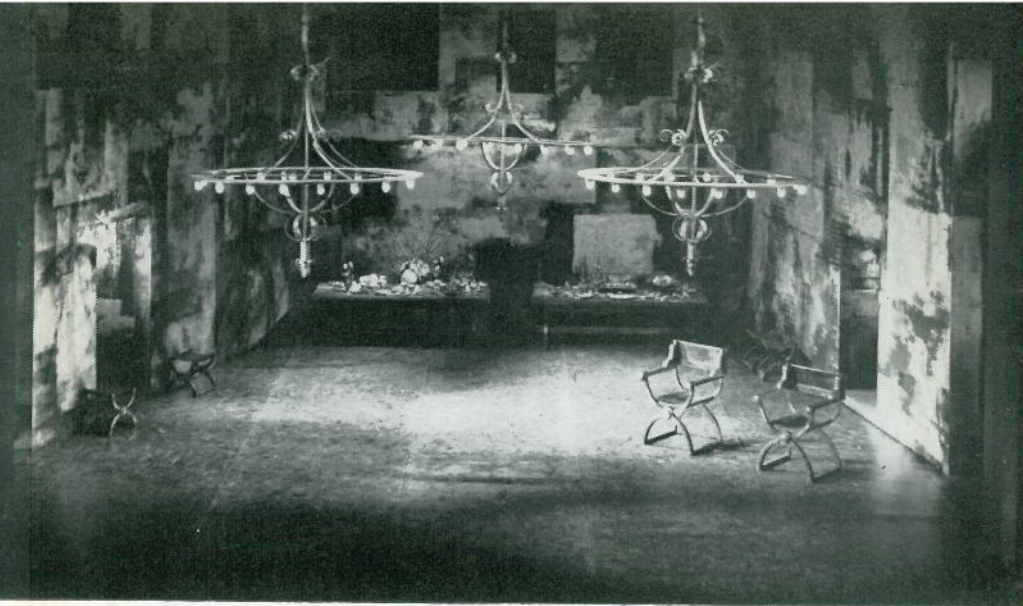
by Charles Bristow

The producer, designer and I met a month before the production was due to open in Manchester. There was the idea of breaking away from pretty pictures but of still being richly colourful. This does not mean necessarily using a lot of colour in the lighting; in

fact, here we had as little colour as possible. For instance one scene in the first act is lit in chocolate (No. 56) and pale gold (No. 52), the set being painted in gold and black. Textured paint helps to warm it up and the lighting just emphasises the gold. In contrast to the setting the costumes are very colourful giving a richness to the picture. The set itself for Acts I and II is semi-permanent to avoid long scene changes which have often bedevilled other productions.

When planning the lighting layout we consider our own house, Sadler's Wells, first and then arrange the touring equipment to match our known capability. Manchester was rigged and lit therefore on the same basic approach as we planned for the Wells and when the production arrived at home the working plot was quite ready for translation in London. This does not mean that the tour is a try-out but rather that, despite the temporary nature of the visit, it has to conform to our standards. Although we work in repertoire certain equipment is naturally special to a production and for *Rigoletto* we have three extra bars. One, down stage, carrying lighting units and Fresnels; the next mid-stage for cloud and mist effects for the last act—projection that is. The third is for back-lighting and there are one or two odd spots here and there for backlighting through windows. We use for this production very little F.O.H. lighting as Michael Geliot works well within the proscenium arch and we are able to light from side booms and perches using as little front light as possible to avoid flattening it out. Visually I much prefer the artistes to work within the set all the time. Unfortunately at the Wells we have an 8-ft. apron and there is always a tendency for singers to move closer to the conductor as each performance goes on. In this production, however, they were instructed to play within the frame and little F.O.H. was needed, except perhaps a slight fill-in for the face in one or two scenes. We have at the Wells very high positions at each side F.O.H. known as "the prosceniums" (at a very acute angle) which are good for this purpose especially for modelling on the faces. These we did use to a certain extent. The general front upper circle equipment was not used at all.

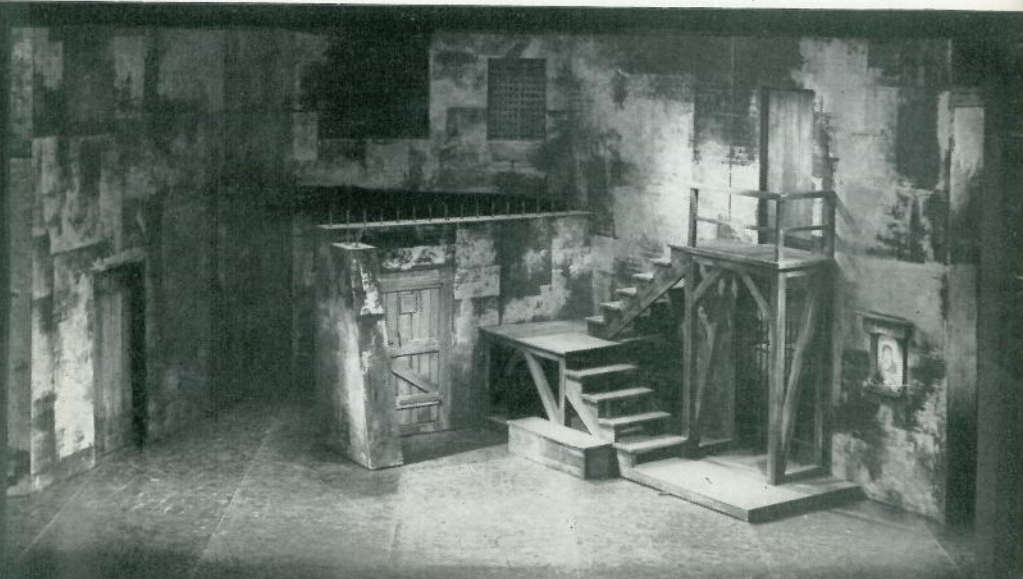
Opening in Manchester with a duplicate rig enables us to put all our ideas together, so that limited rehearsal time in London was no handicap. The opera is in three acts, and each scene is in fact of a completely different nature. We tried in the first scene to achieve a rather sordid hot and sultry feeling which would suggest the dissolute court described. The second act requires *Rigoletto's* garden and a street outside, which in fact is *not* moonlit but is "murk lighting," shall we say. The aim here is to keep the lighting down to a level where the audience can see the actor in the face but at the same time be conscious of this heavy darkness. The text, in fact, on umpteen occasions calls for this darkness. The scene is split into two halves and opens in the street. This is stage right with a sort of broken divisional wall between it and the garden, so although at this time I kept the garden slightly alive with the shape



Rigoletto Act I Scene 1.

of the staircase and doorway, the street was at a higher key for the first entrance of Rigoletto and Sparafucile, the assassin. The entire scene is sinister and to those who know the opera it is the key to the entire work. When we change to the garden scene, we fade the street and cross-fade into the garden. Here the producer and I agreed we would want a warmer feeling for the entrance of Gilda and her duet with her father. So using such colours as 67 Steel tint on a very low check we kept the feeling of blueness but at the same time it was slightly warm. We still had to make sure that there was sufficient light to see and appreciate the abduction, even though it

Rigoletto Act I Scene 2.



Rigoletto Act II.

is said to be done under cover of darkness. This is a case of watching rehearsals and of placing lamps and making sure that every position is covered, somehow or other, even with a glimmer. As a matter of interest in this particular scene I found it very important to go as far away as possible from the stage to judge the result—the furthest being the back of our gallery which is quite a distance for a person to see. If you light in low key from the middle of the stalls there is a great risk that people at greater distances will not see at all, and the result is a divided audience.

In Act II (early morning) we build up to a very dramatic scene

Rigoletto Act III.



which is, in my opinion, the highlight of the opera. It starts with the Duke alone in his study and there must be a certain early morning feeling with sharpness in it, and the photograph shows a grille window on the stage left fairly high which gives the reason for a shaft of light. I use white in this case to keep it cool, less colourful shall we say, striking across the stage, supplemented by maybe two or three perches at low check. On the other side of the stage there is an entrance doorway with a shaft of 67, again at check. This, in fact, plus some purposeful feature lighting on some props and a statue, was the basic lighting for the opening. It carries on with some addition for his aria and we gradually build to a fairly overall white lighting for the entrance of the courtiers. At the end of the scene as a dramatic feature—a coda—we went virtually back to the opening lighting leaving Rigoletto, dagger in table, and Gilda staring at the statue, in the one shaft of white light (just one Patt. 243).

The last act would be, of course, the lighting man's dream, where he could go to town with the traditional storm, and the battle is to get something better each time, but not better than Verdi's music for lightning because Verdi has written a precise lightning plot into the score. The scene opens with an inn in a marsh, very heavy atmosphere again, not really moonlit but a sort of neutral darkness, here and there patches of light and dark. We used a still projection on the backcloth to suggest a mist. This backcloth is, in fact, a black Hanson gauze with a black velour backing it. For this act the main set had been struck and we had the inn arrangement shown in the photograph with a ramp on one side. The scene is virtually split so that there is a candle-lit area on the inn side and on the other side was the darkness with touches of strange light here and there, odd features and rocks; all in a very, very low key, because in the first part of the scene particularly on stage right, Rigoletto and Gilda are hiding in the darkness quite separate from the Duke inside.

As the storm develops we first of all use two very slow storm clouds travelling across at the back. The scene goes on with various cues of candles going in and out and the Duke going up to his bedroom, etc. During all this it is getting darker and darker, threatening the mighty storm. First of all we start with a distant lightning effect which is, in fact, one unit—a Patt. 137 (photoflood). This is where we bring up a second group of clouds which are set for faster speed. This then gradually builds to the main peak of the storm where we use six Patt. 137 (photoflood units) directed on to different parts of the set with hoods to avoid any spill on the black surrounds and wings, etc. At this moment, the killing of Gilda, the stage in fact goes to complete darkness lit fitfully by lightning flashes and strange glimpses of clouds. The loneliness of the stage matching the musical change after the death. As the storm abates we gradually fade away the fast-moving clouds back to the slow and then back to another projection which is again a mist, but in this case a slightly stronger blue colour suggesting a moonlit night. At this moment also moonlight touches the rooftop.

We have 14 perch positions down stage each side (28 in all), 14 pole-operated Patt. 223's on the No. 1 bar and 10 on the second bar. Then we also have as acting areas six pole-operated Fresnels between the sections of our magazine battens and one bar at the back for back-lighting. Our principal telling positions are the fly galleries where we have a fair battery of "low voltage beam lights" and "pageants".

Let it not be thought that the lighting predominates in this work. It is certainly an opera which needs lighting to support the musical images, to set the mood and create pictures within which the artist is comfortable, well-lit and at home in the scene. I think one of the happier things about lighting opera, particularly in a repertoire theatre, is that we are able to carry a first class crew of lighting men who are conscientious. We all realise here, at Sadler's Wells, that a particular opera will appear at the most twice in a week, so that the lighting rig must be simple enough to strip out each evening after the show to enable another opera with an equally down-to-earth rig to be set up the following morning.

CORRESPONDENCE

A Multi-lantern complexity

Dear Sir,

May I join in the correspondence over the multi-lantern complexity. Although working in a rather different field to Messrs. Pilbrow and Reid it has been my experience also that my best work has been done when the number of lanterns has been restricted for some reason. It is perhaps worth considering that the best lighting is often borne out of some restriction, or at least so it seems to me.

When I was at University we were blessed with a fairly good stage; it was interesting that I rarely got as much satisfaction from lighting a show there as I did from working in less well-equipped theatres. I am fairly sure that the results were not as good. This may possibly be due to not taking as much thought over working in a well-equipped theatre where I could have lanterns almost anywhere I wanted them.

It is also interesting (to me at any rate) that in several cases in the use of many lanterns all carefully balanced and set the final result is near enough the same as is obtained by using flooding equipment. (I use this term rather than the terms B and F as I understand that it is no longer with it to even consider the use of these items.)

Two people have told me this recently, the first was a theatre manager who said, "Nobody uses F-lights nowadays, my boy." The second was a producer who stated quite categorically, "I never use F-lights" and hinted that she would be annoyed if I should have the effrontery to do so. It was a pity really as had I had the chance I would have included some, both to relieve the shadows under the wide brimmed hats worn by the characters in the show when down stage and also to light the house tabs in order to give that sense of magic to the audience as they waited for the performance to start.

However, as the theatre of entertainment has been declared dead by the intellectuals of the world, perhaps magic is wrong as well. We must shock our audiences, let us therefore liven up the house tabs (if they exist) with the odd coffin or battered body.

PHILIP L. EDWARDS, London, W.13.

Dear Sir,

The article by myself commented on by Mr. Francis Reid in your last edition, was originally written at the request of Mr. Frederick Bentham for use as a postscript to his eagerly awaited new book *The Art of Stage Lighting*. The reason behind this request was, I believe, that the author himself, felt perhaps slightly out of touch with modern theatre lighting as it is being used on the professional stage.

Therefore the purpose of the article was not to cover the whole process of "Lighting Design," but merely to attempt to explain why a certain trend (albeit an important one) has occurred. Why were the vast majority of theatrical productions employing more complex lighting layouts? Sometimes possibly to little effect, but occasionally to the greater delight of directors, designers, actors and audiences. The "brief" was to discuss complex lighting situations.

I certainly agree wholeheartedly with Francis that many moments of real excitement in lighting are moments of simplicity, moments of "slashes of light and shade", etc. One of my very favourite lighting moments was a scene in an Old Vic production of *Measure for Measure*. Two actors lit for five minutes by a 40-watt lamp in a cocoa tin in which two holes had been punched. (Not, I must apologise, a Strand Electric "Mini-tin".) Further I would certainly endorse his view that a large-scale musical with a large lighting lay-out (probably reluctantly supplied by a cost-conscious management because very earnestly and sincerely needed by a conscientious designer faced by staggering scenic or directorial demands) is extremely difficult to handle. The all-too-often manic working conditions of a frenzied musical demand instant lighting, instant decision, instant creation. Not easy when manipulating complex lighting made more complex by moving or changing scenery. I remember with nostalgia *Love for Love*, *Prime of Jean Brodie*, *Rosencrantz and Guildenstern*—the smaller plays. The tricky ones were *Blitz* or even *Fiddler on the Roof*!

My principal point is that I am delighted Mr. Reid tries to talk to his R.A.D.A. students the "multi-lantern" way. *It is frighteningly easy to create bold lighting effects. It is very difficult perfectly to light actors at the same time.* All too often one still sees incredibly enough the underlit actor. Shadow, the absence of light, is a marvellously potent dramatic weapon. I contend that the first duty of the lighting designer is to illuminate adequately his actors; then he can indulge his penchant for visual excitement or atmosphere.

Lighting can fill a stage with a dramatic three-dimensional picture (some plays want shafts and contrasts, some want a soft, glowing atmosphere) but fine lighting attempts to create this "picture" that is purposeful to the director, and yet at the same time allows the audience to see clearly what should be seen clearly without compromising to the detriment of the original "vision". Only one director in a hundred can place every actor at every moment where the lighting designer wants him. Combining the bold visual effect with the functional illumination without compromise is the difficult bit. That must be why we, the lighting designers—and I certainly include myself—so often leave a theatre disappointed with our own work. It seems much more gorgeous "in the head". But in training the potential lighting enthusiast to a method of building up a lighting composition by starting with the actor's light (as I attempted to describe) one instils a "discipline" in which talent and imagination can flower. Dramatic lighting can be provided and the actor can be seen.

Lastly the foretaste of Mr. Bentham's book seems to indicate that it will truly live up to its title. I'm relieved that my rather dry and dusty dissertation on complexity appeared in the more contemporary columns of TABS. I look forward eagerly to reading the remainder of *The Art of Stage Lighting*; long may it remain the standard work upon our favourite subject.

RICHARD PILBROW