

tween them, and the *Church Times* (4 September) doubted if 'quite sufficient is made of the Bishops. Sir Herbert Tree puts the Bishops into a dim sort of background the while that the two Cardinals sport at the footlights.' Eight limes from the flies shone through the stained-glass windows on each side of the hall, and two amber lamps from the dome flooded the downstage area throughout the scene, in addition to blue light from the battens and blue and white light from the floats."

A note provided by Eric Jones-Evans (who saw Henry Irving play) for David Mayer's 1980 edition of Irving's personal script of *The Bells* evokes for us the flavour of a carefully "lime lit" scene: "The paneling of Mathias's bedchamber is painted on gauze, behind which a black backing is hung. In the darkness the black backing is flown to enable the court to appear as if in a bluish grey haze, the haze being created by the gauze. Behind the gauze steel blue limelights from the O.P. flies pick out and follow Mathias throughout the scene. The other characters are in shadow or in reflected light.

"We know from the original lighting plot in the script that the fly limes had iris diaphragms controlled by the operator. These, when used correctly, provided the essential dream-like quality of the lighting. There were never any sharply defined circles of light; nor could figures be clearly distinguished as regards exact details of costumes. One knew there were three Judges, a Clerk of Court, barristers, members of the public, and uniformed gendarmes. But the whole effect was hazy and like a dream. Even Mathias was a figure with a dream-like, insubstantial and almost spectral appearance; though his facial expressions could be clearly seen."

Here we are examining the work of the two leading English lighting designers of the turn of the century: Tree and Irving. In their work can be traced the beginnings of the multi-spotlight complexity that is the basic technique of the second half of the twentieth century. But the average lighting standard in the great bulk of theatre was much simpler and frequently rough. Most theatre was, after all, based on weekly touring, and light control was based on the integrated operations of a local theatre crew of casual employees who had other occupations by day. They faced every Monday night as a first night without rehearsal and without the benefit of the modern communications system by which such crews can now be talked through a performance.

To assess the scope of lighting as an interpretive tool for realization of the dramatist's text in 1900, it is useful to consider the state of lighting development against the definition offered earlier — a fluid selective atmospheric dimensional illumination appropriate to the style of a particular production. By 1900, illumination sources (gas and electricity) had developed to the point where achieving the requisite quantity of light for simple visibility was no longer a problem. Indeed there were many comments about overbright stages. But these comments were probably not a

response to the actual intensity, which at its very brightest would be much less than the intensity which we expect eighty years later. They were more likely a response to the quality of the light. When oil and candle gave way to gas, there had been accusations of harshness. However, when that yellow-green of gas light had become the acceptable norm, the change to electricity brought complaints of harsh whiteness. But most of the "bright and harsh" problems stemmed from the angle of the light.

The overhead lights and wing lights were primarily scenic lights. The reliance on footlights as the main source for lighting the actor resulted in an unnatural face light with the shadows all reversed from realism. The face — particularly the eyes and teeth — are the actor's primary means of character projection. To have them lit in this unnatural way was an obvious problem for the rapid growth of realism in the drama of the early years of the twentieth century. So also were the unnatural shadows cast by the actor on the scenery — shadows which were taller than the actor and with a height that rose and fell depending on the distance between actor and footlight, shadows which marched across the landscape and sky with a fine disregard for the laws of nature. The need for an environmental realism to meet the naturalistic acting styles and scenery demanded by the more realistic approach of writers was a prime motivation for the development of directional lighting instruments and a coordinated design approach to their deployment on the stage.

The lighting also tended to be rather flattening. The framing effect of the proscenium arch tends to reduce the impression of depth and the actor becomes two-dimensional. This is particularly the case in larger theatres. Unlike the court theatres of central Europe which developed into public theatres with state and city subsidies, the English theatres of 1900 were strictly commercial enterprises. Therefore, whereas many European theatres could retain shallow balconies and consequent intimacy, the English theatres of the turn-of-the-century building boom had to exploit deep overhanging balconies to gain maximum seating as an economic necessity.

Operator attended limes were used to some extent to model the actors from the side, thus enhancing the third dimension. But it was to take the development of small incandescent spotlights to push the growth in the spotlighting of acting areas from modelling angles — a growth that has been constant since the 1920s. Similarly, light as a means of selecting and defining areas could be effected to a limited extent by limes; but full selectivity required the availability of many spotlights and a more advanced dimmer system to control them. It was to take some considerable development in centralized dimmer control before lighting could acquire that fluidity of area selection and atmosphere control that dramatists would shortly require — particularly under the influence of the cinema and those stage directors who were about to start stripping away nineteenth-century staging accretions from the classics in an ef-

fort to rediscover older and simpler styles.

Furthermore, the concept of a lighting style to complement scenic style and acting style was simply just not part of 1900 theatrical thinking. This was an actor-manager's theatre. It required the emergence of a director's theatre to establish that there were several different viable staging styles in which a text could be approached. The 1900 definition of stage lighting might therefore reasonably be a *barely fluid, relatively unselective flat illumination in the atmospheric style of the turn-of-the-century.*

The growth period for stage lighting within the 1900–1945 scope of this volume was the period between the wars, the two decades of 1919–1939. According to Basil Dean, "In 1919 the London stage was suffering from a wartime rundown . . . shabby so far as its furnishings were concerned and extremely old-fashioned in its equipment . . . still using liquid dimmers, arcs on perches either side of the proscenium, and rows of lamps lacquered in different colours, usually red, amber and blue in the battens (i.e. borderlights) and footlights." Dean was a major lighting innovator of this period. He travelled extensively and imported ideas and equipment from New York and Germany. From a base in London's St. Martin's Theatre, he produced a series of successes by such authors as John Galsworthy, Noel Coward, W. Somerset Maugham, Clemence Dane, and J. B. Priestley. Dean was a producer who directed his own productions and acted as his own lighting designer. He was concerned with West End realistic drama whereas the other major source of lighting innovation, Terence Gray's Cambridge Festival Theatre, explored styles representing various departures from naturalism. The Cambridge directors (Gray, Herbert Prentice, and Norman Marshall) worked with Harold Ridge, who can be regarded as Britain's first specialized lighting designer. Ridge's interest was an isolated case: lighting design did not really begin to emerge as a specialist profession until very near the end of the 1900–1945 period. In fact, it was not until the 1960s that the lighting designer became an automatic member of the production team.

Both Dean and the Cambridge Festival Theatre represent a response to the theories of Adolphe Appia and Gordon Craig, who proposed a stage environment based on space and light rather than painted canvas. At a practical level, the influences were Max Reinhardt in Germany and David Belasco in America. Reinhardt and Belasco were in turn supported by two key technologists who enabled them to realize their lighting concepts: Reinhardt had Schwabe and Company of Berlin, and Belasco had Louis Hartmann. The starting point for both Dean and Ridge was the cyclorama. The traditional overhead masking borders, side wings, and backcloth were replaced with a stretched cloth or plastered structure, curved at the sides and sometimes also curved at the top. Where the architecture of the theatre allowed, the side and top extremities extended beyond the limits of the