LIGHTING THE ACTOR: I

CHOOSING ANGLES

In the first of a new CUE series on basic lighting design, FRANCIS REID discusses the main problem with spotlights: *where to put them.* In future Cues, he will consider *which to put* and *where to put them.*

The problems of lighting design are problems of compromise. There are compromises of practice and compromises of theory.

Practical compromises are partly associated with money and partly with time. But most frustrating are the compromises between the ideal positions for lights, and the positions where we are able to hang them. This restriction, however, has improved enormously in recent years. In the newer proscenium theatres, the provision of auditorium bridges and slots varies from the adequate to the generous; while the foh positions in older theatres have expanded to the point where proscenium booms seem as unremarkable to today's audiences as proscenium doors did to the Georgians.

Backstage, current design styles derive from an economy of statement which fortunately coincides with the economy of recession, leaving clearer hanging space over the stage. While, almost by definition, studio theatres now have overall modular lighting grids. And the rock and conference industries, playing in venues rather than more conventional theatres, have developed rigging techniques that bring the sky hook concept ever closer to reality.

So, in comparison with twenty, perhaps ten or even just five years ago, there is now more possibility of hanging lights in something approaching ideal positions.

But where are these ideal positions? Well, again it is a question of compromise. So the search becomes one for an ideal compromise.

Consider an actor standing still and facing the audience. Light from above – absolutely vertically downwards. The eyes will be dark sockets, the nose aglow and causing the mouth to lie in shadow. But only a very small area of the stage will be lit: an area that need be no larger than the circumference of the actor's widest part – chest, waist or hips depending on that actor's personal structure. Very selective, dramatic in its modelling, but doing nothing to let the audience see what the actor is up to with his principal means of projection: eyes and teeth.

Move that light slowly down in the front plane. Gradually more and more light reaches the actor's eyes and teeth. At the same time the area of lit stage floor extends behind the actor. This area contains an actor shadow – a dark area whose shape corresponds to the hole that the actor has made in the light beam by stopping some of the rays.

(*aside*: OK, so I read some physics 35 years ago and so I know that light is a waveform and that I should be using scientific words like frequency and so on. But I have always found light easier to work with if I think of it as a solid. But a rather special solid: you can chop the sides and centre but not the length.)

Back to the actor and the actor shadow: put a bit of scenery behind the actor and the shadow will start to creep up that scenery as the light angle swings down in the frontal plane. When the light reaches the horizontal, eyes and teeth will be full lit and the shadow will be the same height as the actor. And the area that the light is selecting will be a corridor which is as narrow as the actor's width but extends the full depth of the stage – or rather the full depth of the acting area because the light will go on and on until it either hits the back wall or a piece of scenery. This is all, of course, for an actor standing still: moving to left or right will require the corridor width to increase to the extent of these movements.

Drop the lighting angle below the horizontal and the light on the actor's face becomes increasingly unnatural. And the shadow starts to rise above the actor. It gets rather dramatic in a dracula sort of way.

So there is an identifiable area of compromise, low enough for eyes and teeth yet high enough to restrict the length of lit floor. Perhaps somewhere around thirty to sixty degrees? Degrees from the vertical or horizontal? Doesn't matter for thirty and sixty are interchangeable – and that is a good enough reason for picking an angle in a field so subjective that the choice is more than a little arbitrary.

Anyway the degree of compromise will depend on just how tight an area we need to select. The compromise involves choices between relative visibility, modelling, selection and shadows.

Whatever we do, the light will inevitably be flattening rather than flattering. At worst like a single follow spot on an otherwise blacked out stage in a huge auditorium.

So, having discussed light in the frontal plane, let us now consider side light – light in a plane at ninety degrees to the front light.

Let us start again with the vertical downlighter. As its angle moves down, the actor's face and body become increasingly modelled. A little light gets under the eyebrows and into the eyes while rather more gets under the nose and on to the mouth. Also, as the angle from the vertical increases, the actor's shadow will lengthen across the stage as will the corridor required to keep the actor in light.

If the actor is facing out front, lights will be required from both sides in order to illuminate both sides of the face. These two lights automatically produce two shadows.

So with sidelighting we note that modelling and visibility increase, while selectivity decreases, as the angle comes down from the vertical. When the angle becomes horizontal, there will be a complete light corridor across the stage. It will be actor high but its depth, up and downstage, will be dependent on the requirements of actor movement.

Compromise is again likely to lead us somewhere into the zone of thirty to sixty degrees. But the precise angle will depend on several factors arising from the production's requirements. How tightly selected need the areas be? Is there a lot of movement to be sculpted? (dancers, almost by definition, tend to project more with their bodies than do actors). How will the design accept shadows? (If there are on/off flats, their angles can be cheated imperceptibly so that they do not catch shadows but lose them in the bays between the wings. If there are walls running up and down stage, actor high shadows are likely to prove unacceptable, although scenic colour and texture might permit a more acceptable level of tolerance.)

But the standard actor's face angles that have been advocated for some fifty years, the standard angles that were suggested by Stanley McCandless in his 1932 *A Method of Lighting the Stage* and have been at the core of every textbook since (mine included) – these standard angles are in