

Topic 027

Overview of lighting: Style and design

At some point prior to producing the actual 'lighting design', the designer must form a LIGHTING CONCEPT. Typically, this is a statement of what the designer hopes to achieve with the lighting design, and how he hopes to achieve it. It may be written, or verbal only, but the concept must exist, at the very least in the designers' mind.

The concept should be fundamental. It should capture the intrinsic qualities in the play and relate and describe them in terms of light. If properly developed, the concept will assist the designer with every step of the lighting design process. It will be used constantly to justify the designer's choice of style, lighting methods, directions of light, use of intensity, distribution, color and movement, etc.

Often the concept may become clear after the first meeting with the director and the other designers. At other times, the concept may develop slowly over a period of weeks and may not become evident until the designer has had the opportunity of watching several rehearsals.

The lighting concept is generally based on the emotional qualities developed by the playwright and indicated by the script. The concept will also be influenced by the directors' and the other designers' interpretation of the script. Everyone must be on the same page at the same time, when it comes to the design concept.

The lighting concept may sometimes be as simple as: 'to provide a feeling of warm, muted, sunlight over the entire stage, with a strong dramatic sense of motivation from stage left'.

Often the concept will be far less simplistic and will relate more to the production on various emotional or metaphoric levels. As the designer analyzes the play, he will often find; contrasts, conflicts, juxtapositions, metaphors, symbolism, irony, and other dramatic devices. How he relates these images to the physiological of design, is an important part of the design process, and is usually defined as part of the concept.

Example: A stylized play about a couple that are diametrically opposed to each other and are always fighting - might be seen as a 'cat and mouse game'. So the designer will use 'cat and mouse colors' (maybe pink from one side and gray from the other). He may show the contrast between the two characters with contrast in the lighting. The 'cat' may be illuminated with sharp, threatening lighting, while the 'mouse' may be sympathetically illuminated with soft warm light. So every thing regarding choice of intensity, color, direction and movement of light, can all be justified by the concept.

Good lighting can and often does exist, without a concept. However, the lighting designer that takes time to develop a strong overall concept is ultimately better equipped to make rapid design decisions, as there is now complete justification and direction for all of his choices.

Design Communications

The lighting designer must be able to VISUALIZE his proposed design in three dimensions. Further he must have the necessary skills to VERBALIZE or describe the proposed design in words and visual images. Finally, he must be able to DOCUMENT the proposed design on paper

and DIRECT the design in practice. Communication is fundamental in design and art of stage lighting relies on the art of communication.

Technically speaking, it really doesn't matter how a designer communicates his design intentions to others, just as long as he does so clearly and effectively. In professional situations, certain conventions and expectations of the designer have been established over the years. Crews expect clear, concise, detailed information, so that they can work efficiently and within time restraints. It is the responsibility of the lighting designer to ensure that the lighting crews receive whatever direction and information necessary, to ensure that all details of the lighting installation are absolutely clear.

The lighting designer must develop verbal and other skills, necessary to fully describe and illustrate the artistic components of his proposed lighting design. He must be able to visualize his design intentions and then clearly communicate them to the director and to other designers. The designer must be able to describe lighting styles, painting styles, architectural styles, detail and periods, atmospheric conditions, moods, emotions and feelings. The use of renderings may often help. Sometimes paintings from the 'Old Masters' are immensely usefully in discussing and illustrating the styles and qualities of lighting.

Once the designer has a full understanding of all the ingredients, a rough 'lighting concept' drawing, is usually prepared for each scene. These sketches summarize the actor's blocking and provide other important lighting details including; mood, atmosphere, time of day, and indication of any natural or artificial light sources.

DRAWINGS

Ultimately, the lighting designer must produce a PLAN drawing, showing all the required lighting fixtures, precisely located in scale and in relationship to the stage. This is the LIGHTING PLOT, (or LIGHTING PLAN) and it is this drawing that the stage electricians will use to install, cable, plug and color all fixtures. The designer should take great care and pride in the quality of drawings and paperwork produced for the lighting crews. Often if the crew sees that the designer cares about the production, they will also.

SCHEDULES

Any information that cannot be shown CLEARLY on the light plot must be shown in the form of separate schedules. Further, the electrical crew will expect summary schedules showing, fixture; hook-up, color, focus and accessories. These schedules will facilitate both the set-up and daily maintenance of the production lighting. Take pride in your work.

THE LIGHTING SECTION

CROSS-SECTION

Although the various scenic plans are of great use to the lighting designer, it is only with the CROSS-SECTION drawing that this designer can fully visualize the stage setting, in 3-dimensions.

The 'section' typically is drawn as a 'slice' along the center line, from the back wall of the stage to the back wall of the auditorium. It shows in section; the stage floor, the ceiling, (or grid) audience seating, the stage set and all lighting positions (both above the stage and in the auditorium). Often the section will show the stage scenery at the center line as well as portions of the set, right and left of the center line. This is a 'composite' section, and is typically required when scenery isn't placed parallel in relationship to the lighting positions.

Alternately, additional section drawings are often produced showing cross sections at the far stage left or stage right walls of the stage and auditorium. All of these drawing are invaluable in allowing the designer to fully understand and visualize the three-dimensional relationships between the audience, the stage, the setting and the lighting positions.

It is only with this drawing, (the lighting section) that the designer will be able to accurately 'measure' the throw distances from any particular lighting fixture, to the stage. The plan view drawings, alone, are of no use in this regard. The lighting cross-section is always prepared prior to the 'lighting design', and is a most important tool to check lighting angles, sight lines and masking. A scale model is also invaluable.

The lighting section is generally prepared by the set designer, the technical director or the lighting designer, depending on the exact nature of the production, venue, or producing company. Regardless of who produces it, someone must, before the lighting designer is able to produce a responsible lighting design. Further the lighting section will show the 'trim' heights of all electric pipes and all masking borders. This information is necessary to that the stage crew will install the masking exactly as indicated, so as to ensure no interference with the lighting equipment.

The section is always drawn to scale, and this is typically the same scale as the theatre ground plans and the set designer's drawings. Typical scales are 1/4"=1'-0", 1/2" = 1'-0', 1:25 and 1:50. Any section can be rotated 90 degrees to align with it's floor plan view.

Although the lighting section is an essential drawing for the proper planning of a lighting plot, it seldom progresses past the 'working drawing' stage. Once the heights of all lighting pipes, masking borders and other scenic elements have been drawn and checked, this information is usually transferred to a HANGING SCHEDULE, for use by the set-up crew. This eliminates the need for the crew to continue to scale or measure the drawings during the actual set-up.

THE LIGHTING PLOT

LIGHTING PLOT (LIGHT PLOT)

The 'physical' lighting design is typically drawn as a single drawing, commonly referred to as THE LIGHTING PLOT, (or the Light Plot). This is a scale drawing of the theatre and auditorium, with all lighting fixtures drawn exactly in their required location. The light plot must show all information necessary to allow the electricians to install all lighting, including fixtures, special effects, projectors and practical sources, in their exact location. In the world of professional theatre: "If it ain't on the page, It ain't on the stage"

The LIGHTING PLOT must be drawn clearly in order to provide specific information. Superfluous information is not required and serves only to provide less clarity. Remember, this drawing is to clearly communicate information to others, not to show off your drawing skills. The following are conventions used internationally:

The PLOT is usually a horizontal ('landscape') drawing, with the stage running right-left. Common scales include 1/4" = 1' and 1/2" = 1'. Pick a useful scale. Try and use the same scale that the theatre architectural drawings and the stage designs use. An inappropriate scale can result in a drawing that is far too large to readily handle or far too small to show the required information and detail, clearly.

LIGHT PLOT DETAILS

Provide an area for 'numbered' notes, and details when required.

THE HOOK-UP

HOOK-UP

Somehow all of the lighting symbols shown on the lighting plot must be connected via their electrical circuits to dimmers and then to control channels at the control console. It is only the channel numbers that the lighting designer is ultimately interested in. He will usually assign or 'patch' specific dimmers to specific channels, in a logical and organized sequence. Some older systems require circuits to be plugged first to a dimmer through a manual 'patch panel'. In this case it may be possible to assign more than one circuit to a dimmer. In some older control systems, the dimmer number is also the channel number. In newer systems, each dimmer may be assigned to any channel by a 'soft-patch'. So the Hook-up must clearly and logically show the relationship between circuit numbers, dimmer numbers and channel numbers. Again, the sequence of plugging or patching should be logical and organized.

THE HOOK-UP, (or CHANNEL SCHEDULE) is a numerical list of all channels used in a particular production. Not only does this schedule contain; circuit, dimmer and channel assignments, it also shows a summary of all fixture details, shown on the lighting plot. A typical HOOK-UP will show the CHANNEL#, DIMMER#, CIRCUIT#, FIXTURE#, and (Type, Watts, Purpose, Accessories & Color filters, for all units). This schedule is invaluable to both the lighting designer and to the electrical crew.

Typically a small scale production might require 12-24 dimmers with up to 24 channels of control. A large scale production might require more than 500 dimmers assigned to 300 control channels.

THE INSTRUMENT SCHEDULE**INSTRUMENT SCHEDULE**

The INSTRUMENT SCHEDULE is a detailed list of all fixtures on the light plot, shown by HANGING POSITIONS It allows the Head Electrician to rapidly identify all the details, for any fixture.