It was a dark and stormy night

An introduction to lighting design, part one:
Script analysis, research, and sharing ideas

BY SCOTT C. PARKER

LIGHTING DESIGN for the performing arts is an art form unto itself. At the same time, lighting designers are part of a team with the director and the other designers who will create scenery, costumes, sound, properties, projections, and more. It is the collaborative work of the designers and director that brings art to the stage.

This is the first of three articles that will examine the work of theatre lighting designers. I'll start here by explaining the importance of understanding the script and communicating that understanding to the audience. Then I'll outline some of the technical steps required to be a team member in the complex process of a theatre production. Methods of sharing our lighting design ideas will be explored as I discuss visual image search and our own need to be able to draw and sketch. And I'll introduce the use of image-editing software to build a color lighting rendering.

The very first question for the lighting designer (and all of the members of the production team): who are we serving? Is it the director? The actors? The audience? The producer? The set designer? Is it the playwright? This can be a tricky question, especially for new student designers. The answer is the playwright. The play's the thing, and without the work of the writer, the designers, the actors, and the director would not have anything to do.

The fundamental objectives for the lighting designer are:

1. To create an environment in which the event will take place.

2. To make the actors, who are delivering the author's words, visible to the audience.

3. To assist the audience in understanding the story.

What do these three objectives really mean? In the simplest terms: tell the audience whether it is daytime or nighttime and make sure that they can see the actor who is speaking. Of course, there's more to it than that. The work toward achieving the designer's goals begins with a careful and repeated reading of the script.

Script analysis

"It was a dark and stormy night" are magic words to a lighting designer. The opening phrase of Edward Bulwer-Lytton's 1840 novel *Paul Clifford* is familiar to many of us; it was a favorite of Snoopy in Charles Schultz's comic strip *Peanuts*.

Take a moment to reread and repeat the phrase yourself: "It was a dark and stormy night." Close your eyes and say it again. Let your imagination run with the pictures this phrase evokes in your mind. Perhaps flashes of lightning illuminate the scene, casting shadows upon the stage floor. Claps of thunder echo in your mind as you contemplate the wonderful collaboration between you and the sound designer to create this environment.

Now, it is a matter of some dispute whether Bulwer-Lytton was a good writer. There has been a lively discus-

Examples of visual research (see page 28): above, View of Bell Yard near Chancery Square, 1835, by George Shepherd. Top right, J.M.W. Turner's 1796 painting Fishermen at Sea. Bottom right, Turner's Burning of the Houses of Parliament, 1834.
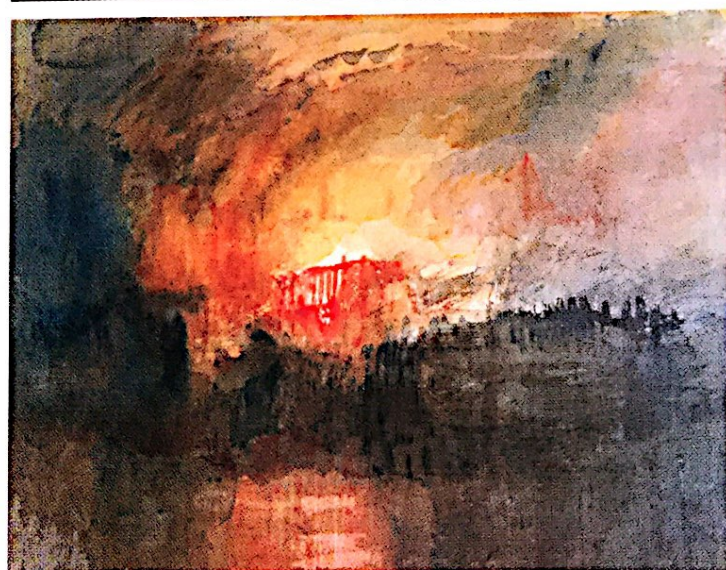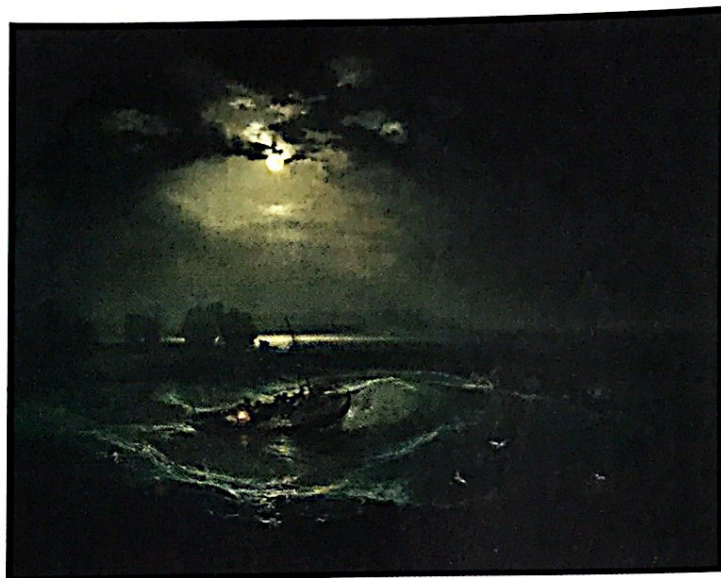
sion on the topic on Wikipedia since 2003, and this particular sentence inspired an annual bad writing competition run by the English Department at San Jose State University. For our purposes it doesn't matter what you think of Bulwer-Lytton as a writer. As the subject of an exercise in script analysis for the lighting designer, he's perfect. Here's the complete text of the opening sentence of *Paul Clifford*:

"It was a dark and stormy night; the rain fell in torrents, except at occasional intervals, when it was checked by a violent gust of wind which swept up the streets (for it is in London that our scene lies), rattling along the house-tops, and fiercely agitating the scanty flame of the lamps that struggled against the darkness."

Take a breath. Now go back and read the entire sentence again. (And again, and perhaps one more time.) Imagine it's your job to light that scene. We already knew that it was dark and stormy. What additional clues do you now have to guide your creative process?

For starters, you now know:

1. The scene takes place in London.

2. The rain is coming down in torrents.

3. The rain is interrupted by violent gusts of wind.

4. Houses will be the prominent scenery and will need to be lit.

5. While it's not clear yet that the scene is set close to the writer's present, we at least know that it's prior to 1840.

6. Perhaps most importantly for the lighting designer, we know that the motivating light for the scene comes from the flickering flame of oil lamps.

If you've been keeping count, we have read through and thought about our dark and stormy night at least five or six times. What does your imagination bring to your mind now?

What we have just done is a rudimentary script analysis for lighting design. By analyzing the author's work, we gain an understanding allowing us to make choices that contribute to the story and help the audience see the place and time in which the play happens.

It is advisable to read the script a few times, as we did with the Bulwer-Lytton sentence, before commit-

Act	Scene	Page	measures	Cue #	Event	Cue notes	spot notes	spot #	Notes	Shopping List
Act 1	1	1			The Carousel Waltz					Curtain Warmers
Act 1	1	1			General wash up					General Stage coverage Front diags. Bax, Bax Diags, Side paths, Front fill, Downs
Act 1	1	1			Juggler cross to Ctr					Ctr Ctr area light
Act 1	1	1			Carousel comes to stop					Carousel Lights (Channel for Prac.) Spinning Diag Bax
Act 1	1	1			Three beauties stop dancing					Three Beauties show lights. Spec on their stage
Act 1	1	1			kid on carousel gives trouble getting off					Color changer systems
Act 1	1	1			Kid's sister skips to her FATHER					
Act 1	1	1			Sister and father (Mr. Bascombe) x to son on horse					
Act 1	1	2			Son gets down. Family x across stage				Fam is rich	
Act 1	1	2			Juggler x to his corner. We see GIRL and SAILOR enter from right					Juggler Special
Act 1	1	2			Girl stops at Billy.					Billy's barker stand special
Act 1	1	2			Sailor goes to Ice Cream Cart					
Act 1	1	2			Sailor returns to girl and Billy					
Act 1	1	2			Girl and sailor leave Billy					
Act 1	1	2			Billy x to Mrs. Mullin					
Act 1	1	2			Carrie and Julie enter from DSL					
Act 1	1	2			Billy x back to his stand and bumps into Julie					
Act 1	1	2			Beauties of Europe Barker					Beauties barker stand

H ◀ ▶ H \ Sheet1 - Table 1 / Sheet2 - Table 1 / Channels / Sheet3 - Table 2 / FollowSpot Cues / ◀ ▶

Part of a lighting cue shopping list, organized in an Excel spreadsheet.

ting thoughts to paper. It is certainly acceptable to scribble notes in the margins to mark the locations of obvious cues during your first read. As you read the script a second and third time, you begin gathering a list of your needs, a sort of a shopping list. This will become your preliminary list of lighting cues.

The shopping list

A shopping list is simply a compilation of all the lighting needs you feel are important to support the play. Ask yourself these questions as you read the script:

1. What time of day does the author wish to convey?

2. Does the time change as the play progresses? (If so, each change is a new item for your shopping list.)

3. What is the motivating or primary light source?

4. Are any practical lights called for? (Table lamps, floor lamps, chandeliers, wall sconces, light spilling in from other rooms, etc.)

5. Is there sunshine or moonlight coming in through a window?

6. Will the play begin or end with a blackout?

This is just a start, certainly not an exhaustive list. But these considerations, and the other information about light found in the script, will help to determine how the lighting designer will go about the work of controlling what the audience sees and does not see.

Your shopping list can be jotted down on plain notebook paper with a pencil, but I like to use a computer to keep my notes organized. I create a spreadsheet with the following columns: act, scene, page number, cue number (for later), event, time (the duration of the cue, for later), notes, and the shopping list item itself, which consists of my thoughts about the lighting at the particular moment.

Any plain text editor or word processor will keep your notes neat and organized, but a spreadsheet program has more versatility and will help you with future tasks. Software like Excel allows you to easily copy or move information from one cell to another. Depending on the intricacies of the shopping/cue lists, you could auto-number the column devoted to cues. Inserting new cues is simple; any

Visual research

"But, what will it look like?" That's the question all designers have to answer, usually before they're really ready to, in a production meeting. The question can be especially difficult for lighting designers because it's not easy to describe light. But the purpose of the production meeting is to exchange design concepts and ideas, so the lighting designer waves her arms in the air trying to indicate the direction from which the light will come and what it will look like. Our challenge is that light by itself is invisible. Without an object or a person to reflect it, the light goes off into nothingness.

The other departments seem to have it easier. Set designers bring in sketches and models. Costume designers show renderings and fabric swatches. Sound designers can play a CD or MP3 file to share their ideas with the creative team.

The good news is that there are, in fact, plenty of methods for lighting designers to bring their ideas to the table. We use visual images that either suggest or illustrate the ideas we have come up with based on the needs of the production as revealed by our script analysis.

Visual research is the process of finding those images. It's just like historical research, except with pictures. What you're looking for are images that show you what a particular place looked like at a particular time. Image research employs many sources, including libraries, museums, art books, newspapers, old newsreels and video, and the Internet.

The accumulated research will be a valuable tool to help establish a common language among the members of the creative team. Visual research is also vital for designers to help formulate their own personal visions of the project. Trying to light our "dark and stormy night" without the visual guidance of images of London in the 1840s would be problematic at best and disastrous at worst.

On page 27 you'll find three examples of visual research that might support the job of lighting the sentence from Bulwer-Lytton. The first is a London street scene painted in 1835 by George Shepherd, titled *View of Bell Yard Near Chancery Square*. It's not very stormy, admittedly, but we'll get to that. What it does give you is an idea of how light plays on the architecture of the city and its narrow streets.

Next let us consider one of my favorite paintings, *Fishermen at Sea* by J. M. W. Turner (1796). Lit only by moonlight, the rough seas suggest a storm that has either just passed or is about to break. The color, to my mind, is not quite what we're going for, but we're getting closer.

We have the street and a dark storm. What about those oil lamps flickering in the wind? Let's see what another Turner painting—*The Burning of the Houses of Parliament*, from 1834—suggests for the lighting image in our mind's eye.

Lighting design is all about layering. Using just one reference image as a starting point for your design has the same limitations as using just one light. Using only one light usually gives you either flatness, starkness, or harshness on stage. Adding more lights from a variety of angles brings out highlights, shadows, and an overall depth to the stage picture. In the same way, using several images to aid in building your design ideas will allow you to create a richer stage picture for your audience.

Lighting sketches and renderings

"But," somebody at the production meeting table is still asking, "what will it look like?" While image research is essential to the designer's process of generating lighting ideas, it may not be enough to help non-visual thinkers see what your light is going to look like on this particular production. We must be able to communicate with the rest of the creative team. Short of setting up a little light lab to show your ideas upon the set designer's model, the lighting designer has few options other than acquiring basic light rendering skills.

Many students entering college lighting design programs are shocked to discover they will need to learn how to create visual representations of their proposed lighting designs— that is, they'll have to draw. It's not that difficult, though, to achieve a competent level of drawing ability, and fundamental sketching and shading skills are as important to the lighting designer as a wrench is to an electrician.

If you find the thought of sketching intimidating, start with the basic grayscale. On page 30 is a five-section grayscale from pencil black to paper
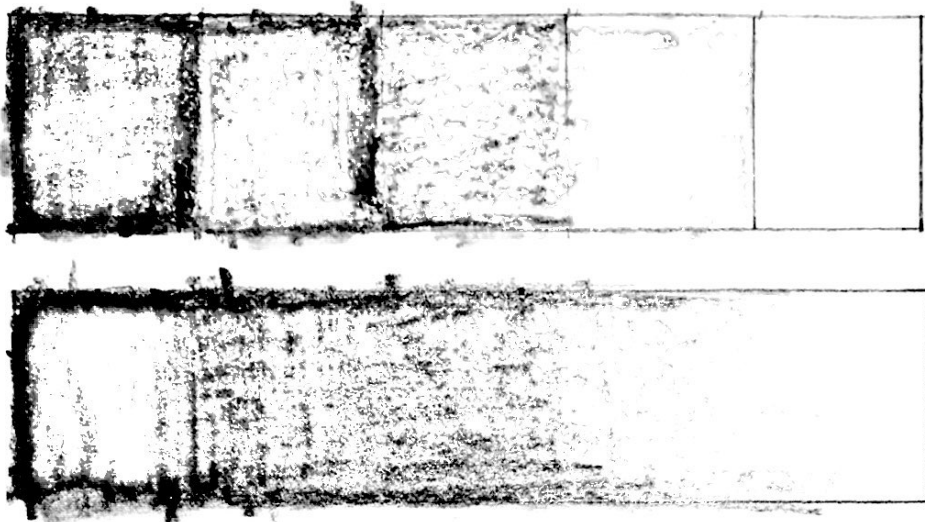
A five-section grayscale (top) runs from pencil black on the left to paper white on the right. Below it, a gradated grayscale.

The four drawings below show how a lighting designer can use simple shading techniques to indicate his intentions. At top left, two figures and an object. Top right, pencil shadows have been added. Bottom left, shadows have been darkened with a black marker. Bottom right, more dramatic marker work.
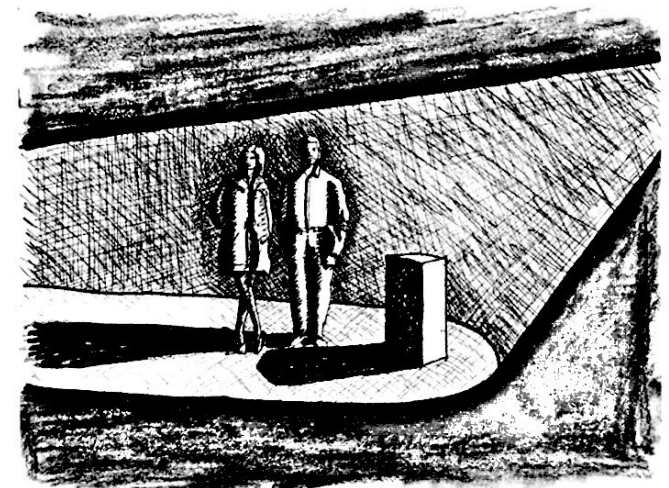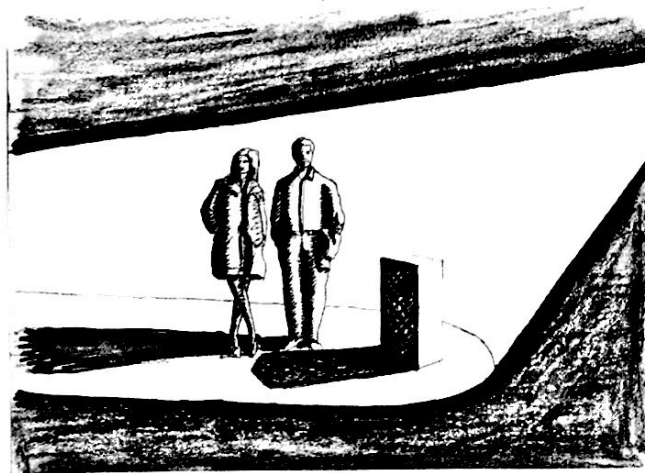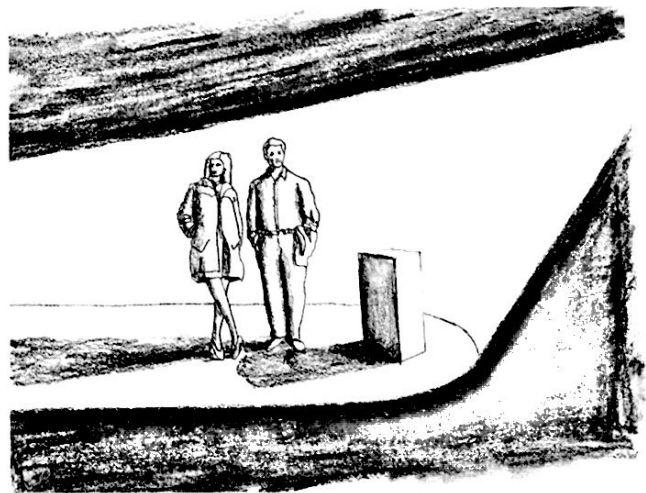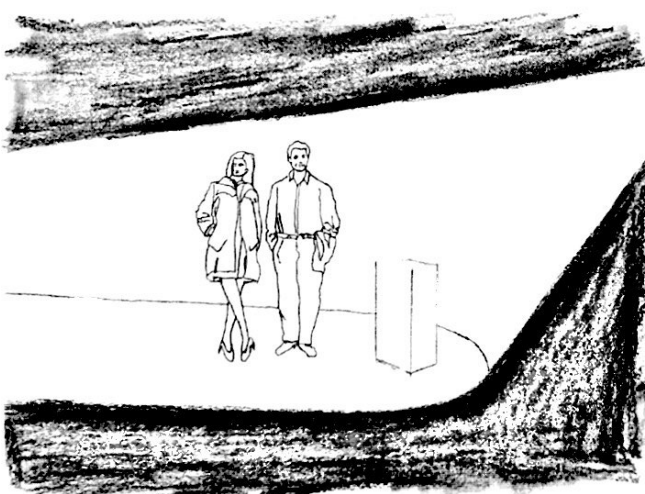
white. Using just three of these variations of gray, you will draw many shapes that can now include a highlight, a mid tone, and a shadow. Depending on the shape of your drawn object, you may use all five shades.

To increase the range of shaded tones available, practice creating a gradual change in tone from dark to light.

Using just a pencil and these shading techniques, the lighting designer can create sketches like the ones below to show lighting direction and dramatic form. Pencil and paper are the fastest, easiest tools available to present your ideas about lighting angle, intensity, and proposed atmosphere.

To bring color into the picture, a lighting designer should also know how to use colored pencils, markers, watercolors, pastels, and even cray-

ons. Let me share some color techniques with you, using both conventional media and a computer.

The examples at right are from the musical *Carousel*, with set design by Mark Morton. The first is a very simple wash of blue watercolor over a copy of the set designer's black-and-white pencil sketch. After adding blue paint, I used watered-down black paint to create the shadows. Then I used Wite-Out correction fluid to paint on the highlights. White correction fluid works very well for highlights as it readily covers your previous layers. An added bonus is that you can then add color to the highlights.

Computer graphics and imagery won't replace basic drawing skills, but you can use software like Adobe PhotoShop to prepare renderings that give a very good approximation of the lighting effects you want to explain to your colleagues. On this page is a series of images that illustrates the steps involved to transform the set designer's pencil sketch into the lighting designer's color rendering.

Summing up

Lighting design is much more than pointing up and asking for a light to be hung on a pipe. As an art form, lighting takes much more work and creative effort than most people realize. In this article we've laid the foundation on which a lighting designer's work is built: script analysis, visual research, and idea-sharing. Later we'll look at hand-drawing light plots, sections, and using computer programs to create the different kinds of technical paperwork required to communicate with the lighting crew. And we'll spend some time getting to know the specialized computer-aided design and drafting programs that lighting designers can use to keep track of the hundreds (sometimes thousands) of details required to keep the production on track.

For now, here's your homework: pick a dark night, a good script, and a comfortable chair—and enjoy the brainstorm. ▼

Lighting design renderings

By hand: A lighting sketch for a production of Carousel, *made by adding a blue watercolor wash, black painted shadows, and highlights rendered in Wite-Out to the set designer's pencil sketch.*

By computer, step one: To create a lighting rendering in PhotoShop, I started with a PDF of set designer Mark Morton's pencil sketch.
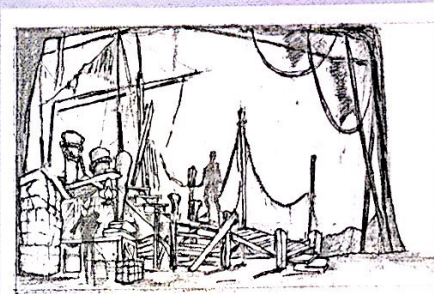
Step two: Using the software's contrast adjustment and pencil tools, I added some detail and dramatic form to the sketch.

Step three: I used the airbrush tool to add blue, mimicking the lighting effect.

Step four: More blue, and darker shadows under the pier unit. The software allows effects to be applied in layers, so the designer can show a variety of looks without re-editing.

Step five: With two additional layers. One contains the white and light-blue highlights coming from stage left. The other holds the amber highlights motivated by an oil lantern hanging from the pier piling.

Below: the lighting design in production at the University of Nebraska.

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