

The illuminators

The lighting designer and the master electrician

BY MIKE LAWLER

THE ACTORS MIGHT wear their own clothes and put on a show in an existing space with no modification. They might shout at the top of their lungs without reinforcement or music to set the mood. But before they begin someone must turn on the lights. In such a pared down production, the person manning the light switch on the wall would be considered the light board operator; the person who screwed the light bulb in is the master electrician; and the one who told him where to put the lamp is the designer. Those are the basic elements of any lighting team working in theatre. (Of course, with such a low-budget production, the same person is probably doing triple duty.) In the world of professional theatre, there are many talented and skilled men and women turning this oversimplified production into a feast of illuminated art. If you are putting on any kind of performance—dance, play, opera, concert—there is one thing you simply cannot do without: illumination.

SCOTT SUCHMAN





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At left, lighting designer John Ambrosone confers with Arena Stage lighting fellow Xavier Pierce during a tech rehearsal for the theatre's production of Damn Yankees. Above, the 2003 Arena production of Camelot, with lighting by Ambrosone.

Illumination is only the beginning of theatrical lighting. "Lighting is the 'visual glue' that holds up and enhances all the other visual elements," explains lighting designer John Ambrosone. As a freelancer and former resident lighting designer (often known as the LD) for American Repertory Theatre (ART) in Boston for thirteen years, Ambrosone has been creating stunning and complicated light designs for theatre, dance, opera, and other forms for almost twenty years. "Light is as accessible and expressive as an actor, but never should upstage or pull focus from the unified contributions of the whole," he says.

Shaping a visual environment

"My role is to shape a visual environment for the play to take place in," explains Steve Woods, a freelance light-

ing designer and associate professor of theatre and design at Southern Methodist University. Woods works extensively with many types of performing arts organizations, including the renowned Jose Limon Dance Company, an ensemble he's collaborated with for seventeen years. "My responsibility is to the director's vision, the playwright, and my artistry," he says.

Just as a sound designer must be part engineer and part composer, the artistry of manipulating light is one that walks the line between keeping up with cutting edge technology and retaining the ability to think like a painter. It's a line that must be walked carefully while concentrating on supporting the vision of the production (see the sidebar "Lighting the sky"). Russell Champa, a freelance designer based in both San Francisco and New York City, does his best to experiment as an artist at every opportunity. "I think that part of the job is to challenge oneself on every project to try something new—a new color, a new type of fixture, new technology, or a whole new process," he explains.

Champa makes sure to keep in mind, however, that his primary responsibility as a designer is finding a way to help tell the story. He explains his role this way: "To help the audience focus on what we want them to focus on. To not get in the way of the actors and their work. To make the space and the world visually exciting and make everyone else look good until you want or need them to look bad."

Coordinating with the other designers and the director is the essential beginning for any designer, and LDs are no different. "The first thing is to understand why the particular work is being done," says Woods. "Being a designer is a lot like being a detective. You connect the dots to find the answer to the question posed by the work." In order to connect the dots, the lighting designer will meet with the director or choreographer, the other designers, and sometimes even the playwright or composer to hammer out a visual understanding of the production.

"I always start with the script and then a big piece of paper and a pen-

cil," says Champa. This is often a tough period for a lighting designer struggling to transform the production concept into a functional light plot. "Translating a bunch of great ideas into a practical solution can be very difficult, especially with lighting," he admits. "Oftentimes nobody knows what you're talking

about until you're actually in the theatre and turn off the work lights and turn on some of your lights. This is when the real work begins."

Over time, Woods has grown to see the art of light design a bit differently. "Of course, the move from paper to reality always brings surprises," he says.

Rather than wait until the system is in the theatre and hung, Woods believes that designers must make an active effort to conceive a system of lighting that limits what he calls "the unpleasant surprises." As a result, his design approach has evolved to more fully account for the realities of each instru-

Two job descriptions

A LIGHTING DESIGNER'S primary responsibility is to ensure that a show's lighting fulfills the director's production concept.

A good LD will strive to maintain cohesion with other design aspects of a production, including sound, choreography, and perhaps most importantly, scenery and costumes. He or she begins this process during the design stage by drafting a light plot and creating an instrument schedule. Another important tool provided to the ME is the channel hookup (also known as a magic sheet). A channel hookup is a simple rundown of every channel the LD plans to use. It will detail every aspect of that channel, including its purpose, area of focus, physical location, gel color or template need, and what type of instrument is to be used.

All of the paperwork allows the master electrician and the lighting crew lead time to assemble and prepare the lighting system before the lighting designer is actually working on-site in the theatre. This will help the ME plan in advance for any necessary renting or purchasing of equipment. "A good number of my shows go into empty theatres," says Steve Woods, "which require you to rent or buy everything you need."

The lighting designer will also make decisions regarding the colors to be used, and what type of instrumentation to employ during the design phase. This is generally dictated to some degree by the budget and lighting inventory of the theatre they are designing for. Like their counterparts in the areas of sound, scenery, and costuming, LDs will spend a fair

amount of time researching and studying the script or piece for which they are designing.

Once the crew has hung, circuited, and patched the show, the LD will begin working in the theatre, utilizing the crew during the focus and troubleshooting phase of the process. After the plot has been focused and all equipment is patched and operating correctly, the LD will write cues for the show. Some LDs arrive with cues already written, which they will then modify as necessary during the tech process.



THE MASTER ELECTRICIAN is a theatre's charge electrician. The ME is responsible for maintaining and operating the theatre's lighting equipment, managing the lighting budget, and hiring the necessary crews to complete the tasks of hanging, focusing, running, and striking individual productions. Between productions, the ME will ensure that the electrics department and its equipment is organized and in proper working condition, guaranteeing that spare parts and replacement lamps are in stock. The ME must also be sure that all of the proper gel (or color) is available, and any other materials specified by the designer, such as pattern templates (also known as gobos), irises, and sidearms. If necessary, the ME will oversee any rigging that may need to be accomplished in order to successfully carry out the design.

During the planning stages and tech process, the ME is the LD's right hand, responsible for putting the paperwork of the designer into action. Supplied with a light plot, instrument schedule,

and channel hookup, the ME compiles all of the necessary equipment and makes a plan for how to organize the work that will need to be done. (Many MEs will create informative flash cards known as hang cards, so that electricians will have the information they need to complete their assigned tasks without having to return periodically to the usually centrally located light plot.) The ME is also responsible for deciding how much time and labor will be needed for a given project in order to ensure that the work is done on schedule.

Generally, the LD will arrive for focus and preliminary notes once the electrics crew has fully hung, patched, programmed any equipment requiring it, and checked the entire system for problems. During focus, the ME will head up the crew, assisting the designer by making sure the proper lights are on at any given time.

Once the show has been focused, the ME will assist the LD in programming cues. If the ME is not also to be the light board operator, he or she will at least be on hand throughout the tech process in order to fix unexpected issues and change things that the LD has decided to adjust in order to accommodate the design more fully, such as the focus of an instrument.

Obviously, the work of an ME is never done. "You work late, you work often, and during the holidays," says Joe Hartnett. "My only day off is Monday—so, going out with your wife, partner, or buddies on the weekends can get tough. But it can be done."

—M. L.

ment he puts on a plot. By perfecting his initial plot and design tactics, Woods has been able to make his time spent in tech rehearsals much more flexible. "I was no longer seeing the show in bits and pieces," he comments. "My research became better as did my understanding of the script and the arch of the play." Woods now tries to storyboard productions with the director as well. "We need to be open to approaching our work not in a tried and true way but in a way that challenges."

The electricians

Much the same way that a scene shop's carpenters and technical director are responsible for building a set to the specifications set forth by a scenic designer, an electric crew is responsible for preparing the lighting for each production, as planned by the lighting designer. The crew, which may range in size from two to twenty, is generally led by a master electrician (other titles include production or chief electrician, lighting supervisor, or, for short, the ME), who acts as the crew supervisor and is the contact point for the designer. "We always joke that we are the people that make the magic happen," says Joe Hartnett, the master electrician for Pittsburgh Public Theatre. "As an ME, I enable the lighting design to come to life."

For Hartnett and his counterparts around the country, bringing a design to life entails the proper reading and interpretation of the designer's light plot, ensuring that the entire lighting system is operational and set up as the LD has designed it, and keeping the labor and equipment costs in line with the budget. "The biggest challenge is being on top of your game and getting the job done," says Hartnett.

Most designers understand that the collaboration between the designer and the technicians who hang, patch, focus, and run the production is of utmost importance. "There is no 'going it alone' in theatre," notes Ambrosone. "A lot of what designers accomplish is due to technicians. It's a common misconception that they too are not art-



ists. They happen to be some of the most gifted artists I know."

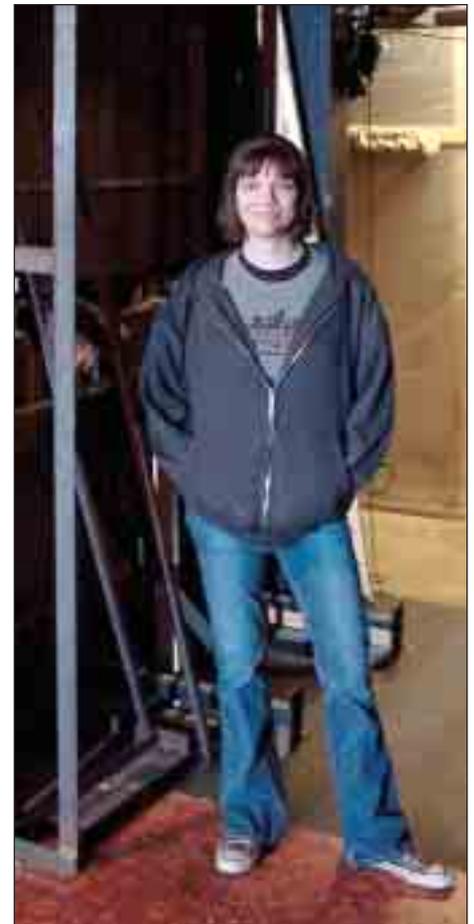
Ambrosone makes a point of contacting the lead electrician as early in the process as possible, so that they are up to speed on the production and thoroughly understand the design concept. "Oftentimes they are better at problem solving and have more successful budgeting solutions than I do," he explains.

"They do the heavy lifting," says Champa, detailing the tasks of the ME. "They figure out the circuiting and dimming, place the shop orders, schedule the crews and often figure out how to achieve whatever crazy idea the designers come up with."

Master electricians are forever adjusting to a constantly changing range of lighting designers. It can be a bit like having a new boss every month or two, and because the working relationship between an LD and an ME is very close and frequently strained under intense deadline and artistic pressure, the ME must learn how to get the work done regardless of how well he or she gets along with a designer.

There are two types of designers, according to Natalie George, the production electrician for the State Theater Company in Austin, Texas. "There are the designers who ask about the budget, and those that don't," she says.

Above, the American Conservatory Theatre's 2003 production of Waiting for Godot, with lighting by Russell Champa. Below, Natalie George, production electrician for the State Theatre Company in Austin, Texas.



Lighting the sky

AMERICAN PLAYERS THEATRE is an outdoor theatre in rural Spring Green, Wisconsin, that focuses on performing classic plays in rotating rep. They usually mount five productions per season—and they use one light plot to serve each show. If you can imagine the difficulty in lighting *one* show in an outdoor space, where the appearance of each show shifts as the sun sets, imagine creating five unique light designs with the same set of lights.

Michael Peterson, the general manager of Willamette Repertory Theatre in Eugene, Oregon and a freelance lighting designer, spends a great deal of his summers as the resident lighting designer for APT trying to do just that.

Fortunately, Peterson had plenty of experience working both in outdoor venues and in rotating rep situations. As the resident LD for PCPA Theatrefest in Santa Maria, California for fifteen years, he gained invaluable insight that has helped him in his five seasons working with APT.

“My first task at APT was to get the most from my rep plot design that I possibly could, while still leaving me enough flexibility with specials to light all five shows,” he says. Specials are the lighting positions that LDs rely on to meet the unique needs of individual shows that may not be covered by general lighting.

MICHAEL PETERSON



The outdoor production of The Merry Wives of Windsor at the American Players Theatre in Spring Green, Wisconsin, with lighting by Michael Peterson.

At APT, the use of specials takes on a new meaning. “The back wall of the theatre is actually open to the woods,” Peterson points out. “So there are two additional washes that light the trees to create different looks for the back-grounds.”

Another consideration is how to use color. For Peterson, this means instructing his ME to change the color between each performance. “The color in the rep plot is actually changed over in all of the washes except the back-light and two front PAR washes for each production.

“Since the shows actually begin before the sun has set during the first part of the summer, I actually stay late

after each tech to review the cues that happen during the ‘dusk’ part of the show,” Peterson says. He must do this in order to ensure that as the season begins to change and it becomes dark earlier, the show retains its intended look. With his years of experience, lighting the shows for APT has become a bit less daunting for Peterson.

“My job is made somewhat easier by the fact that I have designed a very flexible rep plot that gets supplemented by specials for each show,” he says. “But it is still a challenge to make sure that each show has its own signature look and feel.”

—M. L.

“You really have to learn how to handle the designers who don’t, because they will push you and push you as far as they can to get everything they can—even things that they may never use.”

“If you do your job,” Hartnett says, “you will have very few problems—besides a conflict of personalities.” When differences in personality crop up between a designer and ME, he emphasizes, the work must still get done properly. “There is nothing you can do but have your job done to the best of your abilities.”

Woods agrees that the master electrician and the electric crew are a critical element for realizing a great design. He also believes that a crew with a vested interest in the design will naturally be more inclined to do their best work. “I want them to take ownership of the work and contribute,” he says. However, for Kim Palma, a freelance designer based in California, the notion of working with electric crews sometimes takes on a slightly different spin. “Being a woman in the profession, it’s been a different kind of challenge,” she says.

“Many—not all—men in the business are not used to taking direction from a young woman.” But, Palma has found ways to deal with such problems. “I’ve learned that it’s always better to be sweet than demanding—you get your own way with sugar much more easily than with spice.”

A road to the lighting life

Many MEs are either aspiring or working lighting designers themselves. George uses her steady gig as a staff electrician to keep her design work fi-

nancially feasible. Her position as both the master electrician of a mid-size regional theatre and as a freelance designer give her a unique perspective on the industry, as well as the opportunity to network with designers from around the country.

Champa, who also spent many years working as an electrician before being able to make the financial leap to full time design work, acknowledges that meeting and working with established designers is crucial for becoming one yourself. He finds the persistent need to network a struggle, however, and said that the ongoing need to develop new potential working relationships is difficult. “The biggest challenge though,” Champa admits, “was transitioning from the electrics and assisting work to be able to make a living and survive as a designer.”

Gaining experience and training in theatrical lighting shouldn't be hard to come by for anybody truly interested in the craft. However, Woods believes that prospective undergraduate college students need to be careful about choosing where to study if they are serious about pursuing a career in lighting design (see the sidebar on page 28). “I have to say that a lot of programs use their students as a cheap labor force, pretending that these same kids are being trained by this exploitation while the faculty designers design the shows,” he says, advising young theatre students to be more particular about where they decide to attend university and pursue their theatre futures. “The most important thing,” says Woods, “is to attend a great school where your education will permit you to be employable upon graduation.”

Ambrosone has similar advice, emphasizing the need for going to a school where you will get plenty of one-on-one attention from your professors.

At Southern Methodist University, Woods focuses on teaching graduate students the skills they need to succeed in the professional design world. “I think designers need to learn how to read a play with understanding, how to discuss the play with the direc-

tor and playwright, and how to manage their career and life in the theatre as a business person and artist.”

Woods believes that learning how to make it as a freelancer is perhaps the most critical skill. “For someone just starting in the business, the challenge is making enough money to survive each month. Graduate school gives [designers] a chance to fail without disaster,” he says, explaining why graduate study may be a good idea for many young designers. “They can't do that at a commercial theatre and expect to move forward.”

“Intern, intern, intern!” says Palma. “There are millions of opportunities available,” she says. “Look for an artist whose work you admire and volunteer services while you can afford to do it!” Finding opportunities to get your hands dirty and work as an electrician in the theatre—even if you'd rather be a designer—comes highly recommended from designers and electricians alike.

“I find that students coming out of grad design programs may be great on paper, but they often don't understand the basics of an electrician's work,” says George. She encourages students to take time to learn the basics before attempting to step into the big leagues of design.

On-the-job training is also a major part of learning the craft of lighting. “I am proud of the fact that I'm still seeing and learning new things about what I do,” says Ambrosone. “Never think for one second that learning stops at the end of school, college, or your first Broadway show.”

For Champa, it has always been about learning by doing. “Not having a degree, or any grad school experience has meant that I came into design through the back door,” he comments. “I spent a long time assisting and doing electrics work to supplement and finance my design career.” Champa is now a successful theatrical designer who works regularly around the country—including at American Conservatory Theatre in San Francisco, Trinity Rep in Providence, Rhode Island, and various theatres in New York City. He's a good example of how one can

overcome the inherent disadvantages of bypassing college in a business that relies heavily on creating and maintaining professional relationships. “The biggest challenge for me is marketing myself and my work,” he says. In college and graduate school, students of theatrical design are able to connect with many working and aspiring theatre professionals, a clear advantage when attempting to enter the workforce pool.

The bottom line: there is no single path to achieving success as a lighting designer or master electrician. One way or another, you have to get the training and experience, and learn the intangibles to master the technology and the artistry. And, as Ambrosone noted, the learning never stops, even for someone with twenty years of lighting experience. Whether you're planning to serve as an apprentice in a community or professional theatre, hang lights in your college program, or just begin the long road of freelancing, be prepared to work hard. But remember, without illumination, no one could *see* the show, no matter how wonderful the acting, sets, and sound are. Bear that in mind and all the work might seem a bit less daunting. Good luck.

Mike Lawler writes frequently about backstage specialties for this magazine. A ten-year veteran of professional technical theatre work, he lives in Austin, Texas.

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