

PROJECTORS, PAINT, AND PHOTOSHOP

By Mike Burnett, Huntington College, The Painter's Journal, Fall 2003

Over the past six years I have served as both a technical director/resident designer for a small non-profit professional theatre company and as a technical director/theatre design professor for two small independent colleges. In both of these settings, I have found myself producing designs that require large-scale scenic paintings and need to look like photographs or reproductions of real art and architecture. Whether it has occurred in my own designs or in those of another designer, the need to reproduce these images always comes down to the same obstacles that are familiar to us all – time and resources.

At the beginning of my career, I worked on a production of *Death and the Maiden*. The scenic design for this production called for two large (10'-0" tall) ghostly portraits. The desired effect was to give the appearance that someone had drawn the portraits on a chalkboard, only to have them partially erased. This was my first attempt at the process of projecting a rendering. The results were astonishing. Not only were the paintings done in a very short amount of time (under an hour each), but the ease of the process led me to develop it further and use it on a wide variety of designs. This technique can be adapted to photorealism, abstract images, or anything in between.

MATERIALS

Overhead projector
Overhead transparencies
Copy machine or printer for Photoshop images
Several good quality natural sea sponges of various shapes and sizes
Lining brushes
Paint
In some cases, charcoal or permanent markers

I like the following method for several reasons:

It is easy enough that even non-experienced students and community volunteers can perform the task with minimal instruction time and maximum results. It works best being painted up, as opposed to flat on the floor continental, which saves valuable shop space. It is fast.

METHOD

The most basic way to paint using this process is to copy the design onto an overhead transparency sheet, turn on the projector, point it at the scenery to be painted, and go to town. This is nothing new, of course. However, I discovered that applying the paint while the projector is on is much easier and quicker than cartooning the image, then turning off the projector to paint. You can match color to an extent, but more importantly you can match texture, style, and shape in the fly. As I have been refining this procedure over the years, I have found that you need a variety of sponges with many different textures, shapes, and sizes so that you can match whatever texture is before you. Having a wide range to choose from lets you more accurately match the texture of the design. I will still use brushes for large fill areas of lining, but the rest is all sponge, as I have more control over matching the original artwork.

For the 7 Stages (Atlanta, GA) premiere of a new translation of Brecht's *In the Jungle of Cities*, the designer wanted a very large (15h x 30s) photo realistic backdrop of two men strangling themselves. This was in the day before large-scale printing was as popular as it is now and the original estimated cost of that was astronomical. After much persuasion, the designer agreed to let us try to paint the images using this technique rather than totally sacrifice the look he wanted. The result was astonishing. Our scenic artist, two unskilled volunteers, and I completed the 14x30 picture in about four hours. Since then, I have used the process on a large number of shows, each time with great success.

There are a lot of pros to this painting method. As I said before, it's fast and the speed and ease of it definitely make it one of my favorites. I have yet to find an image that I cannot reproduce using this method. Though beware, once you move into larger images, you will need to split up the transparencies, as was the instance in our production of *Side Show*. It is very important that when you do this, the multiple sections of the image are all the same size and give each image an orientation mark to align on the scenery.

Also, I can't express how easy it is to paint using this method. My freshman design students pick up on it fast and prefer it to the grid transfer method that I teach in scene painting class. It's amazing how non-skilled painters can pick up on the process so easily and turn out such great results. I have found that most of the students have a hard time at first translating a color paint elevation and cartooned scenery into a fully realized drop, which is the more traditional method. With the projected image right in front of them, as they match with paint exactly what is on the blank scenery, the results are great. We are basically turning the scenery into an oversized paint-by-number without the numbers, which is a concept they easily grasp. The sponges are easier to master for novices as well. They seem to have more control over the paint, be it application or mixing than with brushes. And, it's a lot like finger painting and who doesn't like to get their fingers deep in it?

With the scenery vertical, the free space in the shop and on stage can be used for the carpenters to continue construction of the set and allows a large number of painters to work on one project, at the same time for faster turnover in assigned projects. If a paint frame or other vertical space is not available, I have rigged up an overhead to a genie lift and a batten (on different occasions) in order to project the image onto the floor. It's a little more time consuming and alignment is more difficult, though if the situation requires it, it is a solution. For some drops, I have also used some scaffold to reach the upper limits of scenery, but it tends to get in the way of the projections.

To be fair, there are some pitfalls to this method. First, if you are planning on using this method while other work goes on in the shop, it will

be extremely difficult. Most projectors, overhead and especially LCD, needs near total darkness for the images to be visible to the painters. When I used this method in the past, all other shop work had to cease in the paint area. The second pitfall is that on larger projects, the alignment can be a little difficult to those who aren't looking out for it. If you are not paying attention, the keystone and alignment of multiple overheads can end up with some less than great results.

EDITING THE IMAGES USING PHOTOSHOP

Photoshop enables me to correct any keystone problems that may occur from the projector. While I was trying to correct a keystone for a drop we were painting, I discovered a lot about the editing tools available on Photoshop. To correct the keystone, go to the edit menu, then to transform > perspective tool to adjust for the keystone. However, the other tools (scale, rotate, skew, distort) gave me much more creativity in my murals. (A side note for anyone doing composite murals in Photoshop – be sure to keep image in its own layer, as it makes the editing process much easier.)

Photoshop also has a number of built in effects that let you as a designer transform the images in a number of exciting ways. The ones I have had the most luck with are: Texture effects, Fresco, Water color, Emboss, Coloring Effects, Invert, and Smear.

For a recent production of *The Miser*, I took three paintings of Renaissance period architecture, inverted the color and skewed the perspective to create my design. Very fast and effective, and fun, too!

ABOUT THE AUTHOR

Mike Burnett is currently the head of Design and Technology in Theatre at Huntington College in Huntington, IN. Mike has either designed or built several hundred shows for professional and educational theatre companies, corporate events and musical acts. Previous design/production credits include the world premieres of When the Word was Green by Sam Shephard and Joseph Chaikin, Whispering to Horses by Jo Carson, Dream Boy by Jim Grimsley/Eric Rosen and the American Premiere of My Mother's Courage by George Tabori. During the 1996 Atlanta Olympics, Mike was production manager for the Free Zone for Artists, an alternative arts festival featuring companies from Serbia, Croatia, Bosnia-Herzegovina, Canada, Nigeria, and the United States. He enjoys working closely with his wife, Ella, who is a freelance scenic artist and designer.