

For this assignment you will light two different versions of your animated character head shot.

The first step is to choose and digitize two backdrop images. These photographs/paintings must be texture-mapped onto either a plane or a skydome object which you will then use as a background behind your character model. Find images that are representative of two very distinct lighting conditions. For instance, day and night are good choices. Indoor/outdoor as well. Or both.

Create a unique surface for each backdrop object. The idea here is for the backdrops to be **unlit**. That is, they should be fully luminous and not be affected by any scene lights. We want them, after all, to appear just as bright and colorful (or dark and washed-out) as they do in Photoshop. To do this, apply the texture map to the color property of the surface, turn specular and diffuse down to zero for the surface, and make sure your mapping doesn't warp the image (too much). Do NOT use the Lightwave image backdrop feature as this assignment is also an exercise in texture mapping.

NOTE that we're not texture mapping the heads themselves. If you're inspired, go ahead and give it a shot. Otherwise, just create some good per-polygon surfaces without textures to differentiate between the features of the face.

Create a different Lightwave shot for each of your two lighting conditions and import one of your backdrop objects into each (it's easiest to just duplicate your final animation file twice to do this). You may want to re-stage your character relative to the camera, change the focal length of the lens, or make any number of layout adjustments to make each shot look nice given the background. These kinds of changes are all fine as long as your character's face remains the major visual element in each shot.

For planar backdrop objects in scenes where the camera doesn't move, you can easily layout the backdrop by making it a child of the camera. Then, you just have to translate it along the z axis to move it out into the field of view.

Now you're ready for the bulk of the assignment: lighting the two shots. You are to use at least 3 different lights in each shot and it would be wise to follow the Hollywood-style system of using key lights, fill lights, and other accent lights like bounces, rims, or kickers. Name your lights unambiguously and layer them into the scene one by one.

Your goals with lighting are twofold. First, you want to integrate your character into the scene you've created. To do this, be sure to make decisions about color, light direction, shadows, and the specular/diffuse impact of each light based on your background images. The other goal is to light *pictorially* for emotional and aesthetic appeal. That is, digress from replicating reality so as to show off your model, its motion, its personality, etc. Light to make a beautiful composition, to guide our eye to the salient parts of the action. Where should we be looking and why?

Due Monday March 4 at the beginning of class - the images

Hand in Targa versions of your two background image selections. Use the file extension .tga so their type is unambiguous. We'll quickly go over them in class to make sure they're appropriate for the assignment.

Due Monday March 11 at the beginning of class - dailies

We will run lighting dailies in class in much the same way as animation dailies. For each shot, you need to hand in a **640x480** lossless (Targa or TIFF) **still** image that is representative of your lighting for the shot. With our new projector, we should have a much easier time critiquing your work. If you are working on a PC at home, PLEASE be sure to check your images before class because gamma differences between the Mac and PC might make your lighting look different.

Due Wednesday March 13 at the beginning of class - the shots

Hand in two 320x240 rendered, motion blurred, movie files compressed with the **video compressor**, one for each shot. Be sure the audio track is present. As some of you remember from last term, rendering final lighting at the last minute is not wise. Get these renders going early and make sure they finish.