Computer Animation I   Fall 2004

Assignment 4: Lighting the Head (supplemental handout)

LIGHT LINKING

As we discussed in class on Monday, it is possible to have your virtual lights shine on only a subset of the objects in your scene. This can be very useful if you want to add a fill light to one object but not have the fill spill onto neighboring objects.

This is accomplished in Maya using "light linking." By default, all lights shine on all objects. To tell a light not to shine on a particular object, go to:

Window->Relationship Editors->Light Linking->Light-Centric…

(if you want to tell an object not to be effected by a particular light, you can choose the **Object-Centric…** option in the Light Linking menu)

To use the Light Linking editor, just click on a light source. This will highlight all objects that are being illuminated by that light. Click on one of the objects to toggle its state, then re-render to make sure your change is working.

SHADOWS

The shadow settings for Maya lights can be found under the **Shadows** section of the attribute editor window (when you have a light selected, of course).

For the purposes of this assignment, you're only to use **Depth Map Shadows**. Maya also provides **Raytrace Shadows** but these are a little harder to get working by default.

By the way, you probably only what key lights (and perhaps rim lights) casting shadows.

To enable Depth Map Shadows, click on the "Use Depth Map Shadows" box in the light attribute editor. The default settings should give you a pretty good shadow to begin with.

If you are seeing "blocky" artifacts (we'll discuss these later), you can change the **Dmap Resolution** setting to something like 1024. Then re-render.

The other attribute you might wan tto use is the **Dmap Filter Size** attribute. It defaults to 1, Raise this number and you should see the shadow edge get blurrier when you re-render.

LOOKING THROUGH SPOTLIGHTS

The sometimes arduous task of aiming spotlights is made much easier when you "look through" the spotlight onto your scene. When you do this, not only are you able to see what the light sees (and therefore, what it illuminates), but it also allows you to use the familiar camera movement keys to re-orient and re-position the light (apple-left, apple-middle, and apple-right).

To look through a spotlight, select the spotlight, then go to **Panels->Look Through Selected** on any of the viewing windows.