In this assignment, you are to build your own unique totem pole out of a modified cylinder primitive. The modifications you make must demonstrate your ability to comfortably use transformations at the point/polygon level (i.e., transformations on the component parts of a primitive and not on the entire primitive). Your totem pole must also be 1m tall. As long as these two requirements are met, you are free to use other primitives in the construction of your totem pole.

This assignment is intended to give you experience with:

- running Modeler
- creating primitives (cylinders, at least)
- managing selections in Modeler
- using transformations on polygons and/or points to modify an object's shape.

Relevant sections of the Lightwave 6.5 manual (required):

pages 20.1 – 20.7 (pdf document page 559), 21.1 – 21.11, 22.1 – 22.7
The move tool is described on 23.10, rotate on 23.16, and stretch/size on 23.22.

Step 0: quit all running applications and insert your zip disk.

- make sure you're sitting at one of the tower Macs that run Lightwave!
- Create a content folder for assignment 2 on your zip disk (command-N on the Mac creates a new folder).
- Inside your new content folder, make another folder named "Objects".

Step 1: run Modeler

- Under the "application aliases" folder you should find "LW Modeler" (the name may be subtly different). Double click on it to run it. Be patient – it make take a moment to start.
- Hit "o" to pop-up the **general options** menu. The first button on the general options menu should allow you to set the content directory. Set it to your new content folder on your zip disk.
- if you only see one viewing window, hit "d" to pop up the display options panel. Choose a layout of type "quad" – this will give you four windows onto your virtual world. Close the display options panel.
- note that the toggle for the grid also lives under the display options panel. This grid is useful in determining if your totem pole is 1 meter high.

(The following steps do not contain everything you need to know. See the LW manual – sections listed above – for instructions on creating objects, managing selections, etc.)

Step 2: create a cylinder primitive

- Under the **create** tab, there should be a **disc** tool. Choose it.
- Hit "n" to pop-up the numeric options panel (might be easier than using the interactive tool). Select "activate" on the numeric options panel.
- Make a cylinder on the y axis with 12 segments that is 1 meter high and centered on the origin. You will want a good number of segments so that you can shape the cylinder.
- close the numeric options panel and hit spacebar to create your primitive.

(over)

Step 3: modify the primitive

- Make something unique. Do this by selecting subsets of polygons and/or points and transforming them.
- Consider the silhouette of your totem pole – a clear silhouette is important in having your design "read" quickly.
- save your work often, and I recommend using different file names in case you make a mistake (version1.lwo, version2.lwo, etc.). The hotkey for saving to a new filename is uppercase S.
- use the perspective view window not only to check out your totem pole – it can be a useful view for selecting polygons and points.
- remember that the render level (wireframe, flat shaded, etc.) impacts how selections are made (see the LW manual reading).

Step 4: save hand in your finished model

- Make sure your final version is 1m tall. If it isn't, re-size it using the size tool.
- Save your final version to your content directory.
- Mount the **Course Storage** disk and get to the cs174 hand-ins folder.
- Rename your final model to contain your name (aka: ChrisPerryTotem.lwo).
- Copy your model file to the hand-ins folder.
- Trash the Course Storage disk before leaving, and don't forget your Zip disk.

NOTES:

If you find this assignment easy then you're not challenging yourself enough with the design of your totem pole. Can you make it hollow? Can you build asymmetric, recognizable features into your model (like a face)?

If you finish quickly, resist the urge to play with surface materials, etc., and instead focus on adding more geometric details. You'll get a chance to work with surfaces soon enough.

Don't get discouraged. If you can't make sense of things, go back and re-read the relevant sections of the Lightwave manual. If that doesn't work, ask classmates that you find in the lab, Dan, or me for help.