

CSCI 181 : 10 : Computer Animation Design I : Fall 2006

Instructor: Bryan Leister

Contact: bryan@bryanleister.com

Office Hours: By Appointment

Workflow for creating an organic character

1. Make sure that Display>UI>Status Line and Help Line are visible
2. Create a cube, use CTRL-A to display the Channel Editor, set subdivisions to W-2, H-2, D-1
3. Name your cube as you want your character named, i.e. alien
4. RMB to shift from Object to "Faces" or (Component mode)
5. Remember to check the Status line, above the viewfinder to make sure you are selecting/snapping objects as you want to.
6. Use Edit Polygons>Extrude Face to make ears, antennae on one half of cube
7. When using scale or move on multiple Polys, be sure to check the Channel Editor if you want to keep faces together as a unit, if so, type "on" where it says off by default. This should appear just after you use the Extrude Face command
8. Save your work!
9. Delete the half you don't want to use. The center of the model should be at the center of the world.
10. Select Polygons>Smooth Proxy with options (the options box). Reset setting to default and then the settings are as follows:

Setup> Mirror Full
Mirror Direction +X

Display> Proxy Mesh Renderable
Proxy Mesh in Layer
Smooth Mesh in Layer
Reference Object
11. After you hit Smooth, you should have two low res proxy cages, semi-transparent and a solid smooth version. In the Channels box, at the bottom you will also have two layers, turn the V on and off for visibility. The R is for a Reference layer, where you can't select the objects unless you toggle the R to a blank box. You will notice T which is for Template, that means you can't select it and it won't render either.
12. You can delete the low-res half that was created, and the smooth proxy will still be a mirror of the original half. Continue working on the low-res half until you have your character!

Notes

- Try to use only 4 sided polygons. The smoothing algorithm doesn't deal well with anything else.
- Use "loops" for areas that will be animated, like eyes and mouth, they will deform more naturally
- Keep the low res geometry as simple as possible, it will animate much faster and it will be easier to make facial expressions when you just need to move a few points
- If you are building something realistic, you may find an online tutorial for just that sort of object, check out:

www.highend3d.com

www.cgsociety.org

- Don't get too detailed with hands, we're not going to be able to animate and rig a full body this semester, I'd like to focus on facial modeling, facial expressions, texturing and rendering along with the overall animation