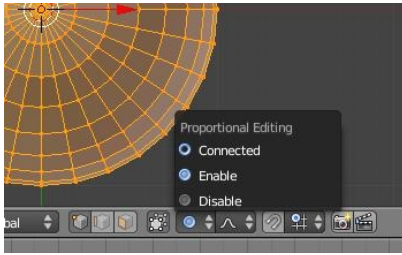


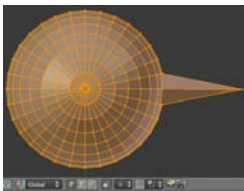
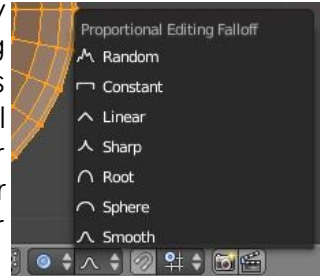
Chapter 3- Creating and Editing Objects

Proportional Editing

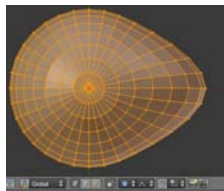


Proportional Editing is used to create a flow in the shape when editing vertices. To turn proportional editing on, press the “O” key while in edit mode or by selecting the **small circle button** on the toolbar (enable). **Proportional Editing**

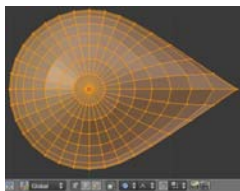
now also works in Object Mode! By selecting the prop. editing command in object mode, objects around the selected object will move proportionally with it. You have several options for effecting vertices in proportional editing. We usually use **Sharp** or **Smooth** falloff, but feel free to experiment with the other options. The examples below are with one vertex selected.



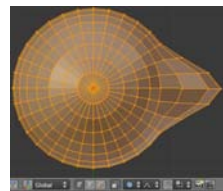
Proportional Editing
“Off”



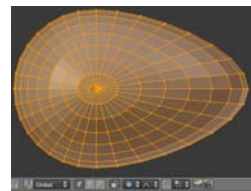
Smooth Falloff



Sharp Falloff



Small Area



Large Area

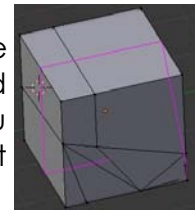


RoboDude Asks: How do I control the number of vertices affected?

By pressing the “+ and -” keys on the number pad or by scrolling the center mouse wheel. You will see a circle on the screen that changes size.

Knife/Cut Tools:

The **Knife Tool** allows you to split edges differently than the subdivide command. To use the knife tool, select the vertices you wish to cut, hold the “K” key while dragging a line across the surface you wish to split. You can also select the “Loop Cut and Slide” option in the Tool Shelf to cut around an object.



Using Subdivide and Proportional Editing to Create Ground Contour:

You can use proportional editing to create flowing landscape easily. The first thing you need to do is create a plane in the top view (**7 key**). While in edit mode, make sure all vertices are selected (vertices are yellow). You can use the “A” key to select them all. In the Tool Shelf, select “**Subdivide**”. Do this a few times. Select a single vertex somewhere near center. Next, switch to a front view (“**1 key**”) and enter *Proportional Editing*. Select *Smooth Falloff*. Type “G” to grab (move) the vertex. Use the “+ -” keys on number pad or scroll mouse wheel to change the size of the selection. Select other vertices and falloffs for more hills and shapes. To see your final work in a smooth display, exit edit mode (“**Tab**” key) and ,with the object selected, Select Smooth from the *Tool Shelf*. This will smooth the mesh in display and final output. Finally, hit the “Z” key to shade your view.

