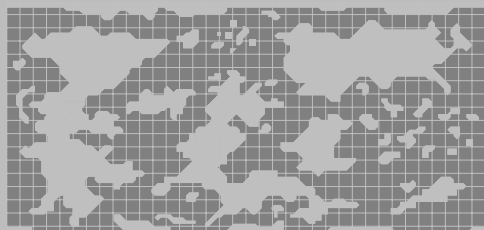


The official **Blender 2.0** guide

- Ton Roosendaal
- Carsten Wartmann





Preview

Public Preview

This is the Proportional Editing Tool Tutorial, that is one of the 13 plus tutorials to be found in The official Blender 2.0 guide, which will be published in January 2001 by Not a Number bv and Prima Tech.

This book is intended as a travel guide, an atlas to the Blender World. Inside, users will find help and references covering all aspects of Blender 2.03 to enable them to bring their creative ideas to completion.

You can buy the printed official Blender 2.0 guide at the Blender internet shop:
<http://www.blender.nl/shop>

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4.4

Proportional editing tool

by Reevan McKay



When working with dense meshes, it can become difficult to make subtle adjustments to the vertices without causing nasty lumps and creases in the model's surface. The proportional editing tool works like a magnet to smoothly deform the surface of the model.

Step By Step

In a top-down view, add a plane mesh to the scene with **SHIFT+A** >> **MESH** >> **PLANE**. Subdivide it a few times with **WKEY** >> **SUBDIVIDE** (or by clicking on the **SUBDIVIDE** button in the **EditButtons**) to get a relatively dense mesh (Fig. 1). When you are done, deselect all vertices with **AKEY**.

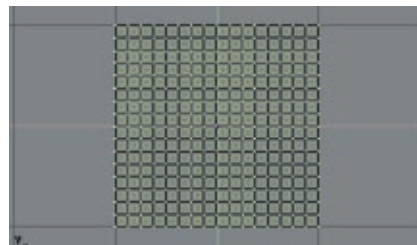
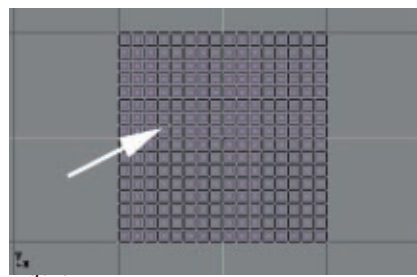


Figure 1

Select a single vertex in the mesh by clicking it with the **RMB** (Fig. 2).



Still in **EditMode**, activate the proportional editing tool by pressing **OKEY** or by clicking on the grid icon in the header bar of the **3DWindow**.



*If the icon isn't visible in the header bar because your window is too narrow, you can scroll the header bar by clicking with the **MMB** on it and dragging it left or right.*

You should see the icon change to a distorted grid with two curve-shape buttons positioned next to it (Fig. 3).

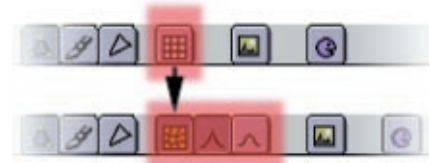


Figure 3

Switch to a front view (**KEYPAD_1**) and activate the move tool with **GKEY**. As you drag the point upwards, notice how other nearby vertices are dragged along with it in a curve similar to the one selected in the header bar.

You can change which curve profile is used by either clicking on the corresponding icon in the header bar, or by pressing **SHIFT+O**. Note that you cannot do this while you are in the middle of a proportional editing operation; you will have to press **ESC** to cancel the editing operation before you can change the curve.



When you are satisfied with the placement of the vertex, confirm its position with LMB. Pressing ESC will cancel the operation and reverts your mesh to the way it looked before you started dragging the point.

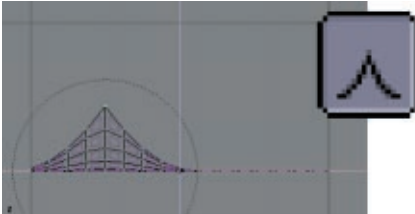


Figure 4

You can increase or decrease the radius of influence (shown by the dotted circle in Fig. 4) while you are editing by pressing KEYPAD_PLUS and KEYPAD_MINUS respectively. As you change the radius, you will see the points surrounding your selection adjust their positions accordingly.

You can get great effects using the proportional editing tool with scaling (SKEY) and rotation (RKEY) tools.

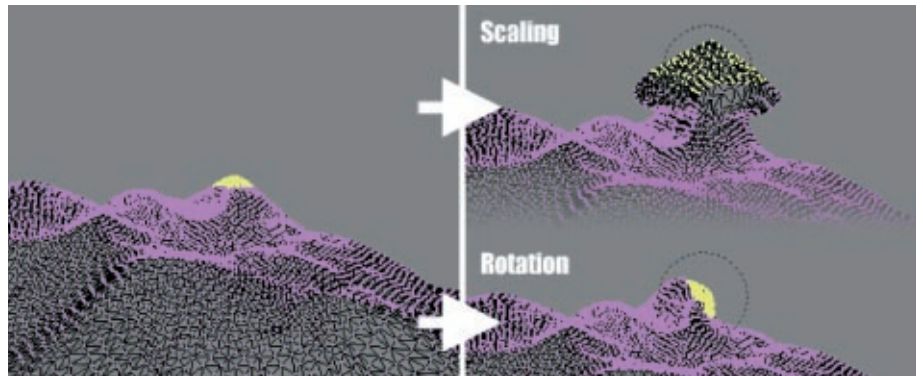


Figure 5

Combine these techniques with vertex painting to create fantastic landscapes.

Fig. 6 shows the results of proportional editing after the application of textures and lighting.

Figure 6

