The official Blender 2.0 guide

• Ton Roosendaal
• Carsten Wartmann
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

Authors
Ton Roosendaal
Carsten Wartmann

Tutorial Authors
Randall Rickert
Reevan McKay
Willem Zwarthoed
Bart Velhuizen
Geno Ruffalo

Design
Riff Raff, Amsterdam, the Netherlands

Published by Not a Number bv and Prima Tech

© Not a Number 2000-12-06
You are free to print this chapter for personal usage, all other means of distributing, copying, printing, commercial or non-commercial, is only allowed with prior written permission from the publisher.

Not a Number bv
Van Eeghenstraat 84
1071 GK Amsterdam
the Netherlands

www.blender.nl
info@blender.nl
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).

![Figure 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.

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.

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.
When you are satisfied with the placement of the vertex, confirm it's 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](image)

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.

![Scaling](image)

Combine these techniques with vertex painting to create fantastic landscapes.

![Rotation](image)

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

![Figure 6](image)