Subject: cutting text out of an object in blender
Posted by LincolnK on Fri, 13 Aug 2010 03:14:19 GMT
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I can't figure out the boolean function in Blender (I am using 2.53)

So I tried using sculpt mode with a an image that has a line of text in an image as the brush.

This does create an impressed image (like a footprint in sand) of the line of text in the object. But it still isn't coming out quite like I would like.

Any suggestions?

Subject: Re: cutting text out of an object in blender
Posted by Tommy_2Tall on Fri, 13 Aug 2010 08:30:28 GMT
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If the shape of the object is flat/spherical/"tubular" I'd go with this approach:

1) Add/create a text-object (it's somewhere under the Add menu, don't remember if it's just called "Text").

2) Type in the text you want, load/select a font and set an appropriate size for the text.

3) Convert the object type to "mesh".

4) Extrude the created text as you see fit.

I almost always use the "subsurf" modifier when modeling and the only problem I've had so far with this technique is how to create a "fatter" border around the edge of the extruded text so that it's properly/evenly rounded off by the "subsurf" modifier.

What I do is I extrude it one extra time, select the polygons that were created by that operation and extrude(push/pull) those polygons based on their individual normals..
That way you can create a contour that is X units outside/inside the text curvature.

The only problem with that is the sharp angles where the extruded polygons overlap eachother.. but that can be fixed by moving/joining vertices manually to fix the "trouble-areas".

If you find a better, more efficient way to model extruded text:
please let me know.

Oh.. and if you're not familiar with the warp (Shift+W) and other ways of transforming that flat text to a certain shape;
just mess around a little with every function under Mesh/Transform to get a grasp of what is possible.

(Transforming a flat mesh to a tube or sphere just takes a few clicks.. and then there's the option of using curves to shape/extrude stuff but I haven't fully grasped that part yet).

Subject: Re: cutting text out of an object in blender
Posted by clsn on Fri, 13 Aug 2010 10:09:21 GMT
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I don't fully understand Tommy_2Tall's suggestion--and I wish I did, because it sounds like it could be an improvement over what I do. I'm not sure it answers the question, though, or maybe I'm missing something.

What I do in order to "press" text into something is to use a Text object, convert it to Mesh, and then Extrude it, as Tommy_2Tall says. Then take that solid object and place it on the surface where you want the text. There are ways to align it to the Normal coordinate system so it's aligned correctly. Then move the solid text so it's partway *inside* the surface (i.e. move it farther down). Then use the Boolean operations (in Object mode) to take the difference of the main object (the surface) and the extruded text. You have to select the main object first, *then* shift-select the text, hit "w" and choose "Difference". You'll have to move the originals away (or delete them) to see the results.

Be careful, though. With really complex objects, boolean operations can take *ages*, and I've also found they start getting buggy and remove faces that shouldn't be removed. You might have to break the problem down into smaller pieces.

Subject: Re: cutting text out of an object in blender
Posted by Tommy_2Tall on Fri, 13 Aug 2010 10:49:52 GMT
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Sorry for the confusion... I realized now that I left out the parts about joining the two mesh objects and stitching them together manually... The boring and tedious parts basically.

I think the major difference between our two methods is that you do a boolean subtraction(/"cut") with the text mesh and I try to "merge" the meshes manually.

Steps 5-... should be something like this:
5: align the text-mesh object and the main object that should have the text inserted so that the text is where you want it.

6: edit the main object and remove the faces where the text mesh will be.

7: join/merge the text mesh object and the main object into one object.

8: Create new faces to fill the holes between the text mesh and the hole in the main object.

The end result of my approach can be seen if you view my beltloop wallet cardholder in the 3D Viewer mode. It's on the "back" side and unfortunately I didn't take any screen shots of it.. but the lines in the text are approx. 0.5mm wide and 0.6mm deep (but rounded so probably around 0.4-0.5 mm deep).