

Strata 3D basics

Strata 3D is a 3D modeling and animation program designed for designers. What this means is that it is simple (in comparison to high-end 3D programs), integrates nicely with Photoshop and Illustrator, and has features that lend itself to design tasks. Also, Strata shares many similarities with other 3D programs - it shouldn't be too hard to pick up any other 3D program and feel somewhat familiar with it after working in Strata.

INTRODUCTION

Strata, like any 3D modeling program, can seem intimidating at first - so many strange options. This sheet, along with the other sheets that explain this program will hopefully ease you into 3D.

THE WORKSPACE

The main window when you make a new document in Strata shows a grid from above and to the right. This grid is the "floor" on which you create things. Using the cube tool (about a third of the way down in the tool pallet), go ahead and draw a cube on this floor.

On the upper left in the main window is a menu labeled "isometric". This menu allows you to see your cube from different points of view. Next to that menu is one in which you can select different visual working modes - Open GL/GL Smooth gives you the best idea of how your cube would look when rendered, but it can be slow to work with if you have many different shapes in your view.

In the upper right corner of the main window is a "+" menu. Among other things, this menu allows you to open multiple windows so you can see your cube from multiple angles at once.

VIEWING TOOLS

In addition to the different views, you can also change your view in a window. The first three tools down on the left of the tool pallet allow you to move around your cube (or other model). If you can't tell what a button is from the graphic, just hold the mouse over it and a 'pop-up' will tell you. You can also temporarily switch to any of these tools at any time by holding down one or several of the following keys: space, command, option, and shift. Jee, I wonder why they made it

so easy to change views...

OBJECT MOVE TOOLS

The first three tools down on the right of the tool pallet are the object move tools. With the pointer-looking tool move your model around by clicking and dragging. Where you click does make a difference - at first just try clicking on the red dots of your model to move it.

EDITING SHAPES

With the move tool (pointer at top of tool pallet), double-click on a model. It will ask you what you want to convert to (you cannot edit a simple shape), and you tell it "bezier surface". Now you can edit your shape using bezier curves just like in Illustrator. You could also convert to other shapes which are sometimes easier to edit.

There are many other ways to edit objects. For example, in the extensions pallet there are combine and subtract tools just like in Illustrator. Try putting a cube and a sphere on top of each other, then click on the subtract tool. Now click on the sphere and drag over the cube. It should subtract the sphere from the cube.

TEXTURES

Strata treats image maps (images wrapped onto an object) and bump (texture) maps in much the same way, and they are largely undifferentiated until you get past the simple part of the interface.

To add a texture to an object, just drag it from the library of textures in the Resource pallet at the bottom of the screen to your model. If you cannot see the library of textures at the bottom of the resource pallet, you may need to click on "Library" in the bottom left of the pallet.

To add your favorite (or not) Photoshop or jpeg file to your model, click on "new" in the resource pallet. In the resulting window, click on the "load" button at the bottom left and choose your photo.

Loading bump maps (and other types of maps) is done much the same way using the same "new" command. Experiment.

After you put your image onto your object you can control how it is placed in the Object Properties pallet. Remember to select your object first to have it show up here. Oh, and also - some textures do not show on your model until you render it.

RENDERING

To render a quick little section of your scene, just choose the camera at the bottom of the tool pallet and drag a box in the main window. You can change the rendering style in the menu below that camera.

To render your whole scene go to Render/Render Image in the menu. In the resulting window you can set what kind of renderer the program uses and the quality. The better the renderer the more time it takes to render. Start off with a quick render, like Open GL, then once you think you have something good, use a ray-tracing renderer set on one of the better qualities. Your rendered scene will show up in a new window which you can save as a TIFF, PICT, or JPEG to open in Photoshop.

Render an animation in the same way, but select "all frames" in the Render/Render Image menu. It will save your movie where you specify and open it in Quicktime for viewing.

ANIMATION

Opening the Project Window (pallet) will show you your animation timeline. Here you can set the number of frames with the orange slider, move to a specific frame with the big slider directly under that slider, and then move your objects. Repeat and press the play button to test.

EXTRUDING

Try importing (File/Import) a logo or other shape saved as an Illustrator file. With the extract tool (4th tool down on the right) stretch out your shape to make an object.

MORE

This sheet just touches on the techniques you can use in Strata. Try different things, experiment, and try to have fun. Use Windows/Reset Views as needed, and always be prepared to start a new document if you get in over your head.

Important update - In preferences, uncheck "Disable automatic keyframing" before doing an animation