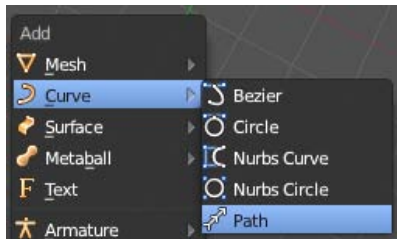


Chapter 15- Working With Constraints

Following Paths and Curves

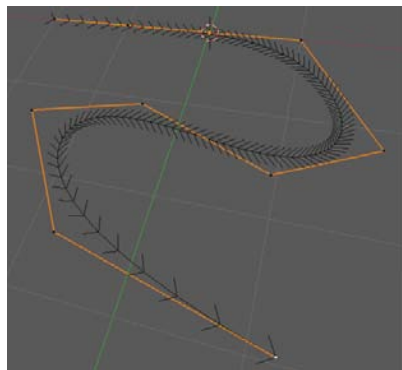
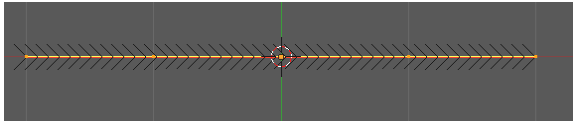
Sometimes you need to have an object flow along a smooth path in an animation. For example, it would be easier to have a spaceship flow along a line and angle and bank along that line then it would be for you to insert location and rotation keys throughout the animation. *Paths and Curves* are found in the same **Add** menu and can not only be used to create animation paths as discussed above, but can also be used to create extrusions. To create 3D extruded objects, you need to create a 2D sketch of a profile and a path for that shape to follow along. In this chapter, we will be working with both.

Following Paths:



Your first step is to create a *path*. Any type of **Curve** in the **Add** menu can be used as a path, but let's use the *Path* option. Hit the "Shift-A", select **Add, Curve**, then **Path**. You will then get a path on the screen. Enter *Edit* mode and you will see several points and arrows pointing the direction of the path. You will also see some options in the *Tool Shelf* related to the path, including "Switch Direction"- useful if

you shape the path in the wrong direction and find out after you place the camera on it. Shape the path as desired, add more vertices through *Subdivide* if necessary and exit *Edit*



mode. You can also select an end point and use "**E**" to *Extrude*.

There are several ways to get the camera, object or lamp to follow the path. For now, we'll stick to the traditional way by creating a *Child-Parent relationship*. Select the object first, then the path (the parent). With both objects selected, press "**Ctrl-P**" to make a

parent. You'll see several options- select the "Follow Path" option. You will see a dashed line between the 2 objects. Press "**Alt-A**" to see the animation along the path. In order to get the object exactly placed on the line, move the object and place it. Rotate the object to point in the correct direction as well. Right now the object's animation is exactly 100 frames long. To change this, make sure the path is selected and go to the **Object Data** buttons. here's what you see:

Frames- Adjust the time it takes to traverse the path.

Follow- If selected, the object will rotate as it follows the path. If not selected, the object will follow, but not curve.

