

Deformers

Blend Shapes

Blend shapes allow you to create expressions in faces. By duplicating the face and creating separate expressions, you can parent the original face with the created expressions, which allows the original face to make multiple expressions. Moreover, by adjusting the sliders of the different expressions together, you can create unique expressions.

Cluster Deformers

Cluster deformers let you control a set of vertices. This is beneficial if you want to stretch or compress a part of an object. You can select some vertices and deform them while maintaining the orientation of the set of vertices.

Texture Deformers

Texture deformers let you deform surfaces with a texture pattern. They are especially useful in the animation of cloth and water.

Wire Deformers

Wire deformers let you deform an object with a wire. The wire can be shaped into curves or whatever you need to shape the object as you desire. These wire deformers can be useful in eyebrow or lip deformations since they can be curved in ways similar to the lips or eyebrows.

Wrap and Lattice Deformers

Lattice deformers are an alternative to molding a shape using faces and vertices. They allow you to treat the object more as a clump of clay rather than tweaking a standard shape. Lattices can be used for molding the basic shape of a face or object that you're trying to model. Another interesting use of lattice deformers are for animation. When a base object, such as a sphere, is pulled out of the lattice it reverts back to its original form. So, when the sphere is inside the lattice it is a clump of clay that is molded however you please. When the object is moved back, it's a perfect sphere. This can be an animation resource. Say you wanted to animate water moving through a pipe. When the sphere of water is moved through the pipe it will look as if the water has molded into a cylindrical shape (you must mold it in the lattice to get this effect), and when it comes back out of the other side, it's back to its original shape.

Muscle Deformers

Muscle deformers let you deform an outer object by the use of an inner system of bones and muscles. The bones and muscles act as influence objects on the outer object so whenever you move the bones, the muscles are deformed and the muscles and bones deform the outer object. In this case, the outer object acts as skin that covers the system of bones and muscles.

Point on Curve Deformers

These deformers usually go well with wire deformers because they let you constrain points on curves and give them a handler. This is convenient because you can then use a handler for deforming a curve, rather than having to move each individual vertex.