

## 3D CHARACTER DESIGN

### Sculptris

1. Place secondary spheres into model. Save 5 copies of your portrait. Name them: Neutral, Surprised, Snarl, Smile, & Sad
2. Modify each copy to create a facial inflection (eyebrows raised in surprise, nose sneer, mouth frowning, etc.)
  - \* It's critical that when you modify a copy that you don't add new polygons. Therefore the "Detail" setting in Sculptris must be set to the furthest left. By doing this, you create no new polygons when you alter the expression. **All head copies must have the same number of polygons for the "Morpher".**

### 3D Max

3. Save and then "Export" each copy as a Wavefront Obj. file. Export the face only, not the eyeballs.

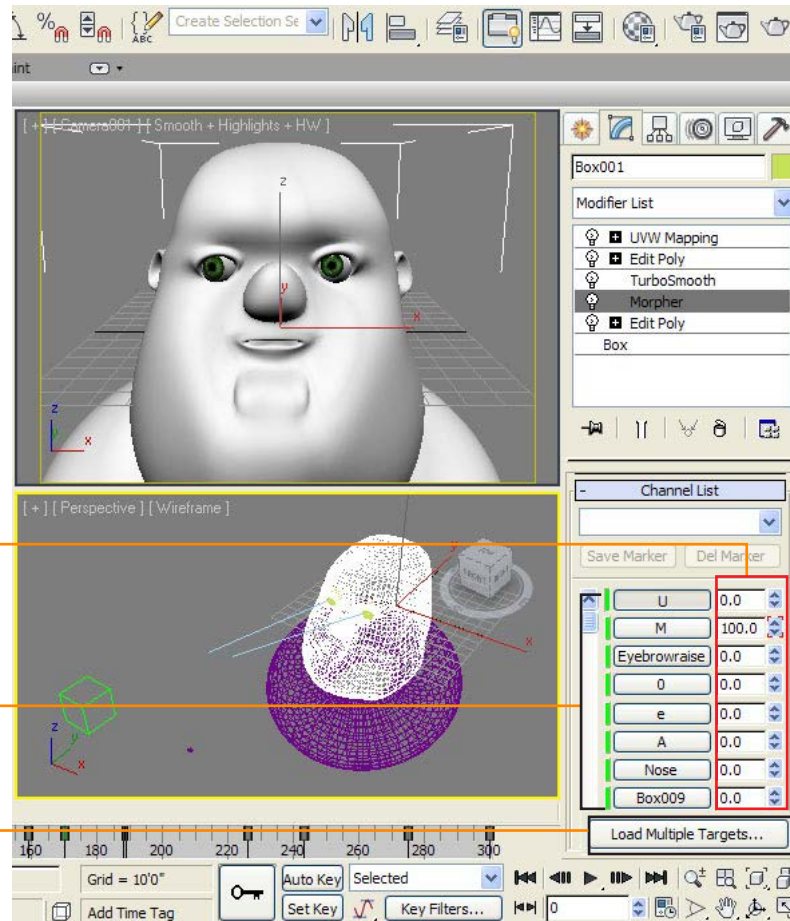
4. Import all the models into 3D Max.

5. Place the Morpher modifier on the "Neutral" face model.

6. Place the other four models into the "Channel List" on the Morpher modifier using the "Load Multiple Targets" button

7. With the Auto Key turned on, animation is created by adjusting the toggles next to each morph target.

8. Create a "looping" sequence of facial animation by starting with a neutral pose and ending with the same neutral pose.





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- The eyes are separate objects that are "linked" to the face. They are then linked to a "Dummy"\* object using a "LookAt" constraint.

After you constrain the eyes to the dumbing object you'll notice that they spin 90 degrees. Check the "Keep Initial Offset" button to fix this.

The screenshot shows the Autodesk 3ds Max interface. In the center, two white spherical eyes are visible. A green wireframe cube labeled 'Dummy Object' is positioned to the right. A context menu is open over the eyes, with 'LookAt Constraint' highlighted. On the right side, the 'LookAt Constraint' properties panel is visible, showing the 'Target' set to 'Dummy001' and the 'Keep Initial Offset' checkbox checked. In the bottom-left corner, the 'Object Type' palette is open, with 'Dummy' selected. A red line traces the path from the 'LookAt Constraint' menu item to the 'Keep Initial Offset' checkbox.

\* A Dummy object is invisible. It is used as in this case to help control another object. You can find them under "Helpers".