

## 3D CHARACTER DESIGN

# THE MORPHER MODIFIER & FACIAL ANIMATION



**Your task is to create a brief (100 - 300 frame) sequence showing facial animation. Use only your best facial model!**



The "Morpher" modifier works by creating multiple "copy" clones of your original face model. Then "tweaking" each clone with a different expression or mouth shape at the sub-object level (soft selection is useful at this point).

**Note:** You can **not** change the number of polygons on the clone(s) or the morpher will not accept it as a legitimate "Target".

1. Place the Morpher modifier on the original face model.

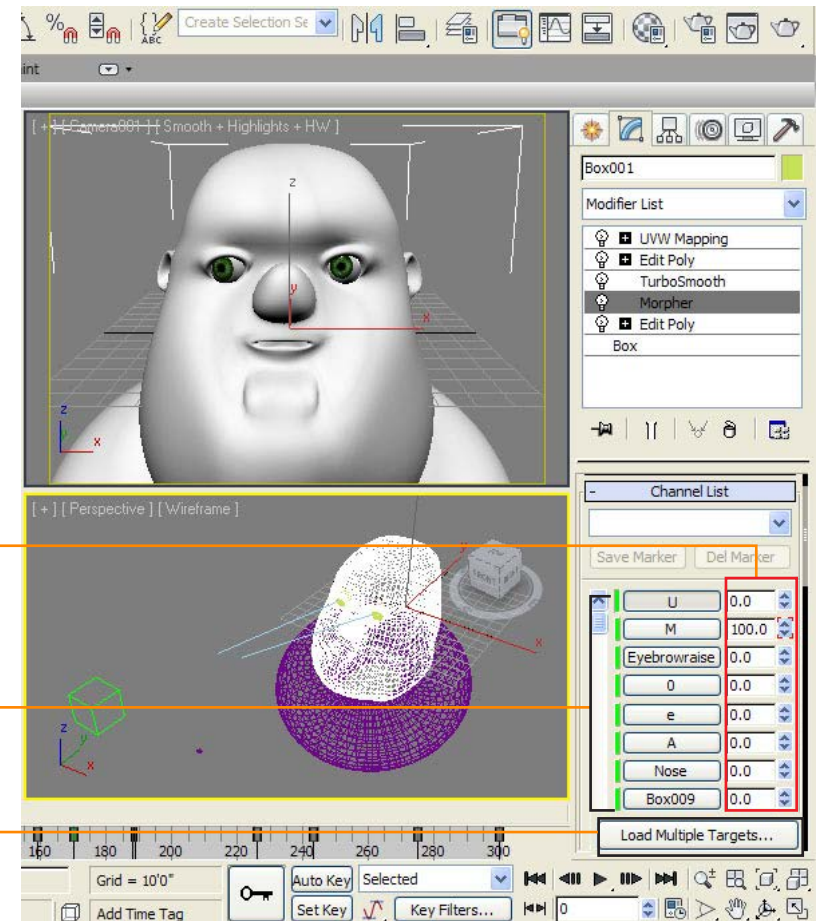
2. Once the copy clones are made, they are placed into the "Channel List" on the Morpher modifier using the "Load Multiple Targets" button

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

4. When the various toggles are adjusted, the expression is reflected in the original face model.

Things to tweak:

1. Eye lids
2. Ears
3. Mouth shapes
4. Nose
5. Eyebrow area
6. Cheeks - Expand and Contract





- 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 text above to the 'LookAt' menu item, then to the 'Keep Initial Offset' checkbox, and finally to the 'Dummy' object in the palette.

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