

Making Morph Targets

From Start to Finish

Needed: Poser 4 and a 3D graphics modeling package.

(a great free modeler is available at 3d.com it's called Strata 3D it's all you'll ever need for making modeler geometry files. The pro version costs about \$495 but isn't necessary for editing geometry.)

In this tutorial I use Lightwave 6.5b. I assume you have at least read Chapter 13 Advanced Body Shaping in the Poser 4 manual, still I'll keep it simple yet complete.

Part I

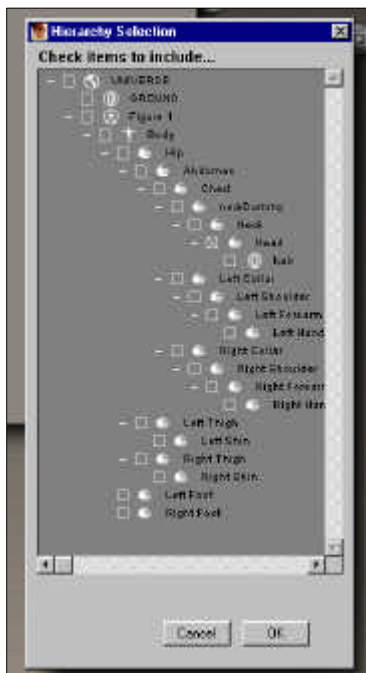
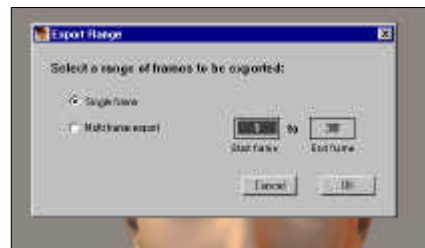
Start out with the body part you want to morph.

Morphs begin life with the exact geometry as the part you want to morph. So where do you get the geometry? From your model. Here's how:

Fire up Poser and load the model you want to create a morph target for. Select the body part by mousing over and single clicking. The body part selected will appear at the bottom of the Document Window (Poser talk for your camera view).

File | Export | Wavefront obj

Export a single frame.



Deselect the universe and select only the body part you wish to make a morph target from. In this case I selected the Head.

Acknowledge the export by selecting OK.

You'll be presented with a dialog box requester to give the geometry file a filename and location on your hard drive. Browse to the location you wish and give it a filename. Then select SAVE. I gave mine the name of p4femh2.obj (use a name you like if the file won't reimport into poser read the aside:

A file naming aside.

(I have found that if I don't adhere to the old 8bit filenames convention Poser will not reimport the .obj file. There is no problem going out to LW just a problem going back into Poser. I use Windows NT I'm told it is no problem in Windows ME)

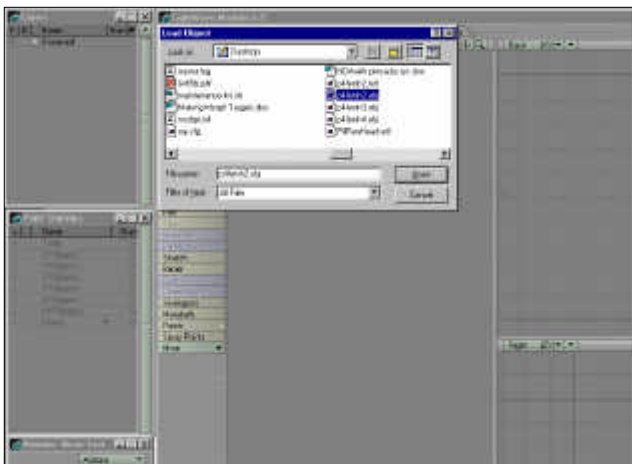


You'll get another dialog box. Tell it you don't want to translate the geometry. Failure to do this will result in your morph target moving the head along the trajectory of the offset. That is, when you spin the morph target dial you will see the head physically move away from the rest of the model trying to move the head to the offset position in the world transformation. Not good :(

Part II

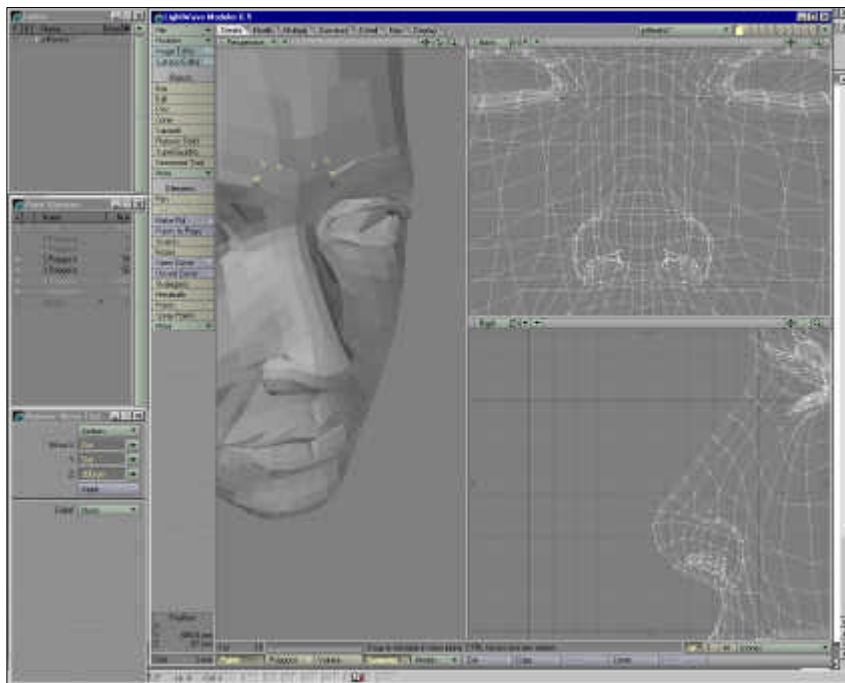
Deform your geometry

The point of this part is to make a fairly large deformation. Beyond what you think is reasonable. So if you want larger lips on your model make the lips 20 or 30% larger than you think you want. Once you bring this altered geometry into Poser as a morph target you will be able to nicely scale the amount your morph target affects the base geometry.



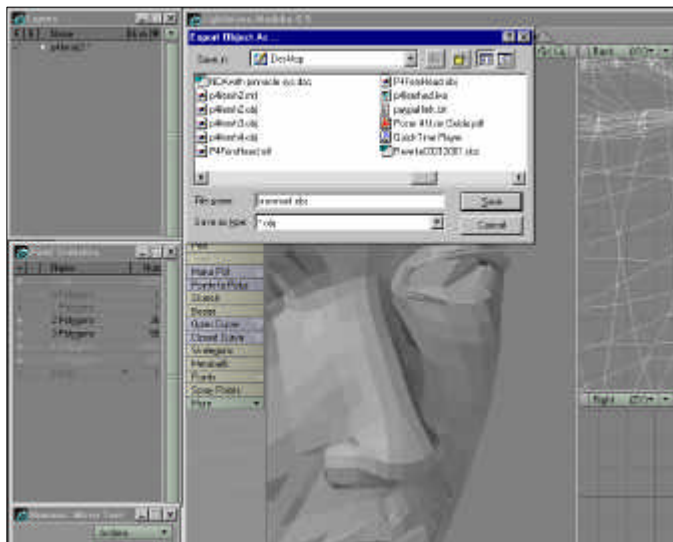
OK now fire up Lightwave or the 3D editor of your choice. I'm using LW 6.5b in this tutorial but the principles will be the same regardless of your modeling program. Load the geometry file we previously exported for P4nudefemale's head.

Poor Posette (AKA P4nudefemale) she always looks so worried (if you started out life as a zygote and stayed that way you'd be worried too). So let's fix her furrowed brow. I just selected the vertices (points) and translated them +Z a little (that is back into her head). You may hate her lips or something. Just change the geometry to make your morph target.



Pay attention here:

Don't scale, translate, or otherwise bif the location of the whole head geometry in XYZ space. Zoom in if you need a better look! Only translate or scale the portion of the geometry you want to see changed in your final product. If you do translate the whole geometry Poser will think you want to move the head as part of the new morph target. If you scale the whole head Poser will think that the scale is part of the morph. You could scale a group of geometry like a muscle bulge, but if you scale the whole arm it will scale the whole arm when you use it as a morph target. Nuff said.



OK you've changed your geometry. Again this new geometry represents an extreme that's all a morph is. Poser will stretch the points between the base geometry and the geometry you just created (well it can push it past it, but it's usually awful).

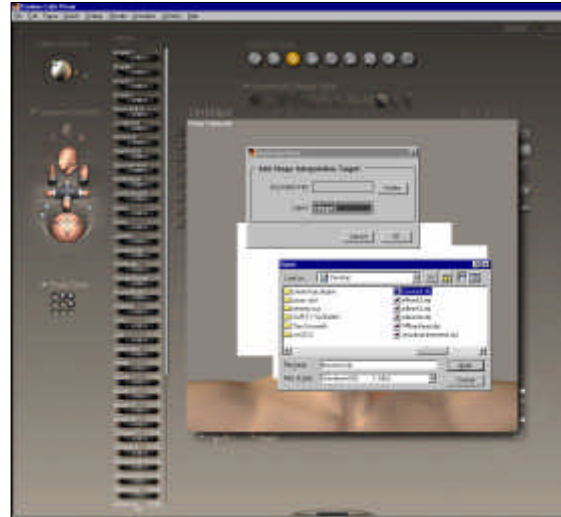
Now export the geometry (as .obj) and give it a new name. In Lightwave select File | Export.

I named mine browmorf.obj

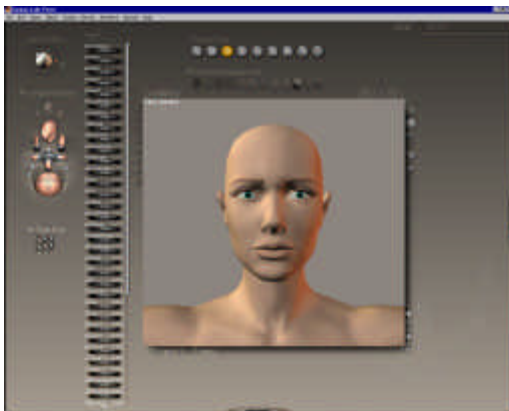
Now on to Poser where we will bring in the modified geometry as a morph target.

Part III Import your modified geometry as a morph target.

With the head selected click on Object | Load Morph Target. Click on the Locate button and navigate your way to the altered head geometry file.



Give the morph target a name if you wish in the label field then select OK.



The name you give the morph will appear above the topmost morph dial. Cool!

Don't save the figure yet! Once the morph is there and you save the geometry as a cr2 or pz3 file the morph targets are incorporated into the cr2 file and when you load the figure the next time the morph targets will still be there.

Later you can get rid of or reorder the MTs (p292, 293 of Poser 4 Manual) if you don't like what you have. (Keith 'Spanki' Young brought this to my attention.)

- open the Hierarchy Editor window
- click on "Show Parameters"
- scroll down and find the morph in question
- click once on it (this is tricky sometimes... make sure it's not trying to let you rename it.)

- with the target selected, hit the Delete key once (again, be careful to hit it once).
- voila, morph target is gone..
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- **Alternatively** you can manually edit the cr2 file with a text editor or use CR2Edit
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- CR2Edit also allows you to **copy morphs from one cr2 to another**.

Avoiding Copyright Hazards, morph target compression:

(tip: Hard disk space isn't so critical these days but if you want to distribute your morph targets over the internet and or you don't want people mucking up or modifying your morphs very easily then check out . <http://morphs.bbay.com/tutorials/squishing.html>
This method has the advantage of creating a .obj file. You just apply it like any morph target although you won't be able to look at the geometry in your 3D modeler unless you go backward through this process.

Essentially it strips the .obj file of all extraneous data except the geometry that was moved. The base geometry is thrown away. This also protects the copyrights of artists since you must have the model (hopefully purchased) to use the morph target.

An **easier way** is to use OBJaction Mover. <http://www.sandylodge.demon.co.uk>
I believe the links is available from the Poser Utilities section of the Free Stuff @ renderosity.com. Although much much easier this method produces a file that requires OBJaction mover plus the original Zygote model to recreate the needed morph target. If you Want to sell your morphs and the base model belongs to someone else then this is the only way to go and not violate their copyright.

You can make whole body morphs which essentially makeover a model into something quite different. For example you can take Posette (P4 Nude Female) or Vicky and make them into a very different looking person. Once you strip away the Zygote model you can sell or (please give) give away your delightful work without fear of a Zygatack. Your models based on a common geometry can still take advantage of other people's morphs, clothing, textures, hair, and eyelashes. Makes life a lot more enjoyable and expands your creative horizons.

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