

How I Make a Head Morph in Poser

as of Poser 13

And Package It for Renderosity's Freestuff

Updated 7/21/25

WHAT I MORPH

When I make a head morph, it might also include the neck and other separate objects, like the eyes, upper/lower teeth, upper/lower jaws, ears, and control handles. I could make changes to the tongue, but...yuck, no.

I USE PMDs

In Poser under Edit/General Preferences/Misc., I have *Use external binary morph targets* selected. This will create a PMD file along with the PZ2 files I'll create.

MAKE the MORPH

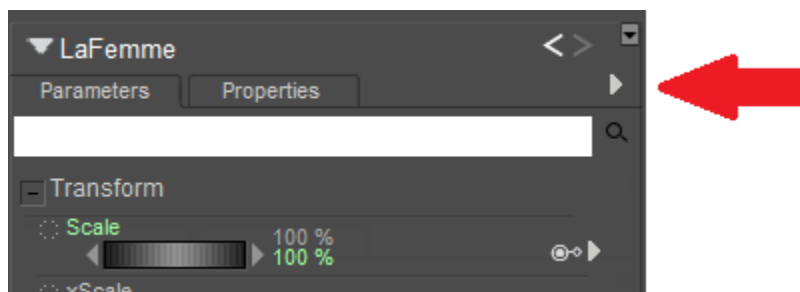
First, I **zero the figure**. I've learned that there's a difference between using Edit/Restore/Figure and Figure/Zero Figure. The former restores the figure to its default state, while the latter zeroes the figure.

Next, I do the **dial spins** for the morphs I have on that figure to get the effect I want. I may also make changes to scales, rotations, transforms, and control handles.

Following that, I might use the **Morph Tool** to further sculpt changes. There could be multiple custom morphs I create.

SHOW HIDDEN PARAMETERS

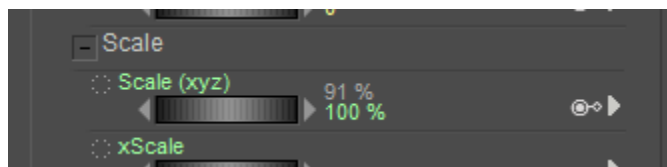
If changes are being made to scale/rotation/trans, the hidden parameters probably need to be made visible by clicking the upper right arrow on the parameter dials.



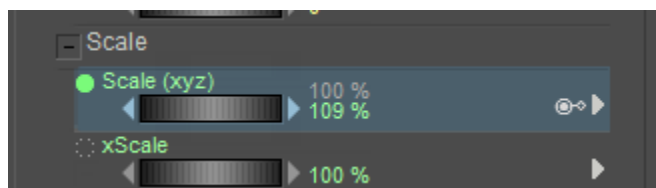
Morphs can make changes to these scale/rotation/trans values, too.

For example, you change the head size of Victoria 4, using the Morphs++ Head

Size morph, from 1 to -.09. This will also change the scale of the eye objects and the jaw objects. Let's say, you don't want the eye size that proportionate size.



The top number in the right eye parameters represents the scale size made by the Head Size morph. You can change the bottom number so the eye size changes to your desired size.



DUPLICATE the FIGURE

Edit/Duplicate 'La Femme' (or whatever figure model I'm working on). I push this duplicate figure aside for the time being. It may come in handy later. Now is a good time to save the scene. It can be deleted when all is done.

SAVE the NotFBM MORPH

Create a folder for the character in the Pose library.

Any scales, rotation, transform, and control handle changes don't save when you spawn a full body morph. If I've made such changes, I save a PZ2 for the figure to its Pose library folder and name it NotFBM (meaning not Full Body Morph). I select only the body parts where I've made changes and further select only *Body Transformation* and *Scales*, not *Morph Channels*. I'll use this later.

SPAWN the FULL BODY MORPH

Because the head morph is for a new character, the figure should have a character name, like Mary. After I click Figure/Spawn Full Body Morph, I'll provide a morph name, like MaryHeadMorph. This will appear on every body part of the figure including Body.

EXPORT MORPH INJECTION

I zero out the main figure with Figure/Zero Figure (but not my duplicate figure; I leave that alone). Then, in the figure's Body parameter, I set MaryHeadMorph to 1.

Next, I do File/Export/Morph Injection. In the pop-up, I click Select None. Then I select MaryHeadMorph.

I save the morph injection to the character's folder in the Pose library and name it

INJ_Mary_LF. (INJ for injection, Mary for the character's name, and LF for the figure model.) This will create a PZ2 file and a PMD file.

REPLACE the MAIN FIGURE

The main figure I've been working on contains morphs in addition to its base model. If it's Victoria 4, I've been using Morphs++. If it's La Femme, I've been using La Femme Pro morphs. What I want now is the base model with no additional morphs.

So I'll delete the main figure (but keep the duplicate figure!) and add its base model to the scene. I'm left with the base model and the duplicate figure I pushed to the side earlier. I'll be doing testing on this base model later.

Edit the INJ_Mary_LF PZ2

Min-Max

I'll open the PZ2 in a text editor. I use Notepad++. This is what the top of the file looks like:

```
{  
  
version  
  {  
    number 13  
    build 895  
  }  
injectPMDFileMorphs :RUNTIME:LIBRARIES:POSE:People:La  
Femme:Mary:inj_mary_lf.pmd  
createFullBodyMorph MaryHeadMorph  
  
actor BODY:1  
  {  
    channels  
      {  
        groups  
          {  
            groupNode Morph  
              {  
                parmNode MaryHeadMorph  
              }  
          }  
        targetGeom MaryHeadMorph  
          {  
            name MaryHeadMorph  
            initValue 0  
            hidden 0
```

```

        enabled 1
        forceLimits 1
        min -100000
        max 100000
        trackingScale 0.004
        masterSynched 1
        interpStyleLocked 0
        uuid 1AA2C96F-EB52-4EAA-8558-531D6D68A375
        numbDeltas 25892
        useBinaryMorph 1
        blendType 0
    }
}

```

I change these two lines in the `actor body` section:

From

```

        min -100000
        max 100000

```

To

```

        min 1
        max 1

```

When it comes time to use this PZ2, it sets MaryHeadMorph's value to 1. (You only need to change the min value to 1, but I always just set both to 1.)

Delete unchanged body parts

Next, I delete the body part sections I haven't changed from the PZ2. I always keep BODY and always keep HEAD (this is a head morph, after all).

First deleted is the hip section, which looks like this:

```

actor hip:1
{
    animatableOrigin 1
    channels
    {
        targetGeom MaryHeadMorph
        {
            name MaryHeadMorph
            initValue 0
            hidden 0
            enabled 1
        }
    }
}

```

```

    forceLimits 1
    min -100000
    max 100000
    trackingScale 0.02
    masterSynched 1
    interpStyleLocked 0
    valueOpDeltaAdd
        Figure 1
        BODY:1
        MaryHeadMorph
        strength 1.000000
        deltaAddDelta 1.000000
    uuid 75510988-647B-4E09-AA80-B73031912E33
    numbDeltas 724
    useBinaryMorph 1
    blendType 0
}
}
}

```

Then I delete the waist, abdomen, etc. Even though it's in the head, I delete the tongue sections, because, as noted earlier, I don't do tongues. La Femme has WAY MORE body parts than, say, Victoria 4, because of all the control handles. If I've made control handle changes, I just leave all the head ones in, because I never remember which I've changed. The NotFBM PZ2 will tell me that.

I stop deleting before I reach the end of the file, which looks like this:

```

figure
{
    conformScale 0
    conformMorphs 0
    conformForceEndPoint 0
    conformFollowOrigin 0
    conformTranslations 0
}
}

```

Save.

EDIT the NotFBM PZ2

I want to now transfer the scale/rotation/transformation/control handle changes from NotFBM to INJ_Mary_LF, but first...

I've noticed a difference in the NotFBM PZ2s between La Femme and Victoria 4. When

I've made scale/rotation/transformation changes in La Femme, those changed values appear in the NotFBM file but don't (or don't always?) appear in Victoria 4's file. However, it's not really a problem, because V4 doesn't have all those gazillion control handles. Plus, we have that duplicate figure, pushed aside, on hand.

Victoria 4

On the duplicate figure, I select the possible body parts that could have scale/rotation/transformation changes.

HEAD, NECK, LEFT EYE, RIGHT EYE, UPPER JAW, LOWER JAW.

That's it. For each, I look in the Parameters palette and jot down the changes.

Next, I open the NotFBM file and make the changes as needed. If I've reduced the Neck yscale to 80%, I change the last 0 (default is 1) in the neck section's yscale key to .8:

```
actor neck:1
{
  channels
  {
    scale scale
    {
      keys
      {
        k 0 0
      }
    }
    scaleX xScale
    {
      keys
      {
        k 0 1
      }
    }
    scaleY yScale
    {
      keys
      {
        k 0 .8
      }
    }
  }
}
```

If I've changed the left eye's scale to 70%, I change the scale to .7. And if the left eye's xtran parameter reads .025, I change the xtran in the file to .0025. (It's divided by 10, for some reason.)

```

actor IEye:1
{
  channels
  {
    scale scale
    {
      keys
      {
        k 0 0.7
      }
    }
    scaleX xScale
    {
      keys
      {
        k 0 1
      }
    }
    scaleY yScale
    {
      keys
      {
        k 0 1
      }
    }
    scaleZ zScale
    {
      keys
      {
        k 0 1
      }
    }
    smoothScaleZ head_smooZ
    {
    }
    rotateZ zrot
    {
      keys
      {
        k 0 0
      }
    }
    rotateY yrot
  }
}

```

```

    {
        keys
        {
            {
                k 0 0
            }
        }
    rotateX xrot
    {
        keys
        {
            {
                k 0 0
            }
        }
    translateX xtran
    {
        keys
        {
            {
                k 0 0.0025
            }
        }
        trackingScaleMult 1
    }
    translateY ytran
    {
        keys
        {
            {
                k 0 0
            }
        }
        trackingScaleMult 1.000000
    }
    translateZ ztran
    {
        keys
        {
            {
                k 0 0
            }
        }
        trackingScaleMult 1.000000
    }
    }
}

```

After I've made the changes, I delete out the body part sections where no changes have been made. Then, within each remaining body part, I delete out the "paragraphs" where

no changes have been made. Using the example above, I've deleted the unchanged paragraphs.

```
actor IEye:1
{
  channels
  {
    scale scale
    {
      keys
      {
        k 0 0.7
      }
    }
    translateX xtran
    {
      keys
      {
        k 0 0.0025
      }
    }
    trackingScaleMult 1
  }
}
```

What should remain are only the body parts that have been changed but were not captured in the MaryHeadMorph full body morph. I copy these from the first **actor** to right before **figure** at the bottom, and then I paste it to INJ_Mary_V4 right before that PZ2's **figure** at the bottom.

Save.

La Femme

La Femme has more body parts where changes can be made, but, on the plus side, they're all captured in the NotFBM PZ2 (unlike with Victoria 4). Although I don't have to check the parameter palette for these changes on my duplicate figure, I do have to scroll through the NotFBM file to see where the changes have been made.

Discrepancy: Although an xtran value, for example, in the NotFBM file for La Femme may read .0025, the parameter palette xtran value for that body part probably won't read .025. It'll be more like .021. I don't know why. I just know the small difference doesn't make a discernible difference in the final morph.

Like with V4, I delete the body part sections that have no changes and delete the unchanged "paragraphs". I copy these from the first **actor** to right before **figure** at the bottom, and then I paste it to INJ_Mary_LF right before that PZ2's **figure** at the bottom.

Save.

TEST the INJ PZ2 on the BASE FIGURE

Now, I test INJ_Mary_LF in my Pose library on my base figure that I replaced my main figure with earlier. (My duplicate figure will continue to remain as is.) I check any scale/rotation/transformation/control handles changes to make sure they've taken effect (as closely as possible) to what's in the INJ_Mary_LF PZ2.

MAKE the REM PZ2

I want to inject my head morph and just as easily remove it, so I make the remove PZ2 next. I open INJ_Mary_LF in my text editor and save it as REM_Mary_LF.

The first thing I do is change the words *inject* and *create* to *remove* in these lines:

From

```
injectPMDFileMorphs :RUNTIME:LIBRARIES:POSE:People:La  
Femme:Mary:inj_mary_lf.pmd  
createFullBodyMorph MaryHeadMorph
```

To

```
removePMDFileMorphs :RUNTIME:LIBRARIES:POSE:People:La  
Femme:Mary:inj_mary_lf.pmd  
removeFullBodyMorph MaryHeadMorph
```

This would include changing *inject* to *remove* for any custom morphs I've made.

Next, any changes I added here from the NotFBM PZ2, I need to zero out. If I've made a scale change, I change that value back to 1. If I've made rotation/transformation/control handle changes, I change those values back to 0.

Save.

TEST the REM PZ2 on the BASE FIGURE

Now, I test REM_Mary_LF in my Pose library on my base figure. I make sure MaryHeadMorph has been removed from the Body parameter palette. I also make sure the NotFBM changes have returned to their default values.

CLEAN-UP

If all goes well, everything except INJ_Mary_LF and REM_Mary_LF can be deleted from the Mary folder in the Pose library. These PZ2 files and corresponding PMD file will remain on my hard drive. The PZ3 used for creating the morph can also be deleted (or saved for future reference to the duplicate figure in it). Whatever.

MAKE the MORPH AVAILABLE for FREESTUFF

Items needed for Freestuff:

- 300px X 350px png/jpg/gif thumbnail image
- Between 800px up to 1200px wide png/jpg/gif promo image (I usually make mine 1200 X 1200 png)
- 91px X 91px png INJ_Mary_LF image (must have the same name as the INJ file)
- 91px X 91px png REM_Mary_LF image (must have the same name as the REM file)
- A title for the morph
- A description for the morph (I usually include a readme.txt file that contains the same info as the description)
- ZIP file with the PZ2s and PMD and folders in the proper order (I usually include the promo and thumbnail images.)

I use Poser and Corel's PaintShopPro to create my images.

The ZIP file must contain folders and subfolders in the proper order. For example, my parent folder would be called Mary for LA FEMME. Following is the folder tree:

MARY FOR LA FEMME

 RUNTIME

 LIBRARIES

 POSE

 MARY FOR LF

I put my PZ2s and PMD and INJ/REM pngs in the MARY FOR LF folder.

I put my promo and thumbnail images and readme file in the RUNTIME folder. (I assume they'll be moved wherever the end-user wants them.)

I compress MARY FOR LA FEMME to a ZIP file.

Last of all, I upload my items to Renderosity's Freestuff.