

The Almighty NIF Importer

This tutorial will cover the basics of using the NetImmerse .nif importer, and how to correct some of the problems it creates.

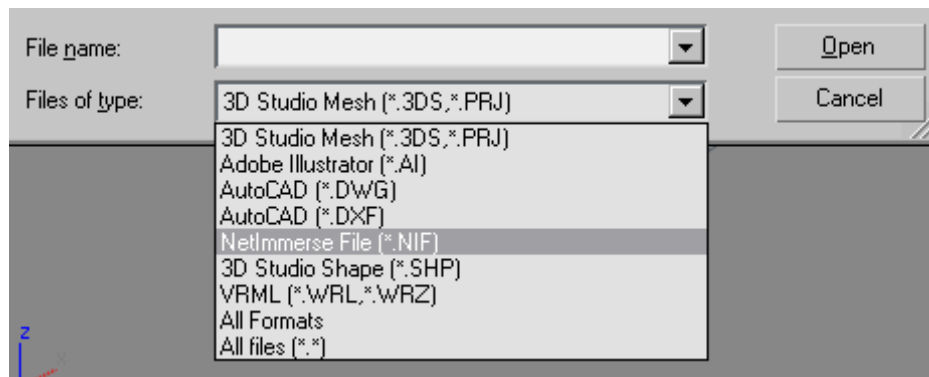
I assume you have a working knowledge of 3D Studio Max; editing meshes, using materials, etc. Plus; the ins and out of The Elder Scrolls : Construction Set (TES:CS), creating mods and working with Morrowind files and textures. If not there are many TES:CS tutorials and many, many, more Max ones on the 'net.

I refer to Max 5.1 and TES:CS 1.5, but the basics will transfer to any versions you have.

The Basics

The .nif importer is a fan created utility. It's an amazing gift to the community, but has several issues. The creator is no longer around, so it's in a perpetual alpha state. It can be quite unstable.

To install it simply place the single file, NifImport.dli, in your Max\plugins\ directory. You should then see the option for "NetImmerse (*.NIF)" under the File -> Import... menu. That's about it as far as operating the plug-in goes.



It will import some meshes, but not all. Some will crash Max instantly. Usually animated files are the worst, yet I've had a simple static crash, and files with complex animations import. I've yet to successfully import a file with a particle system.

Some tricks to try; copy the .nif from the CD to your hard drive and clear the read only property. I've had some files crash, then import when read only was cleared. If you have an animated file with

both a (filename).nif and an X(filename).nif try both. Sometimes one will import but not the other.

If you get an error message referring to "D:\3dsmax42\maxsdk\include\tab.h" installing the Max SDK seems to cure that. You will need to do a custom install of Max to install the SDK.

If Max still crashes there is not much else you can do. If you get a successful import it's a good idea to save the file, uninstall the plugin, and re-start Max.

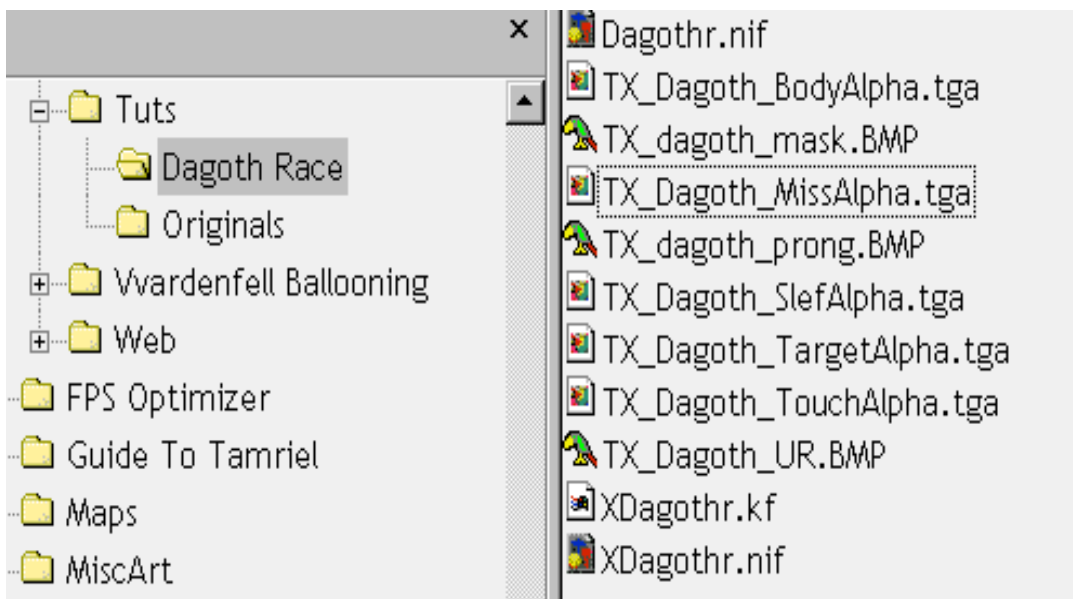
Note (by Thanos): You can "insist" on the same file 3 or 4 times. Sometimes the file will load at a later attempt. This only works for NIF files that DO NOT contain animations or special effects.

Animations will be lost on import. Several other properties are messed up, but can be recovered. Read on to find out how.

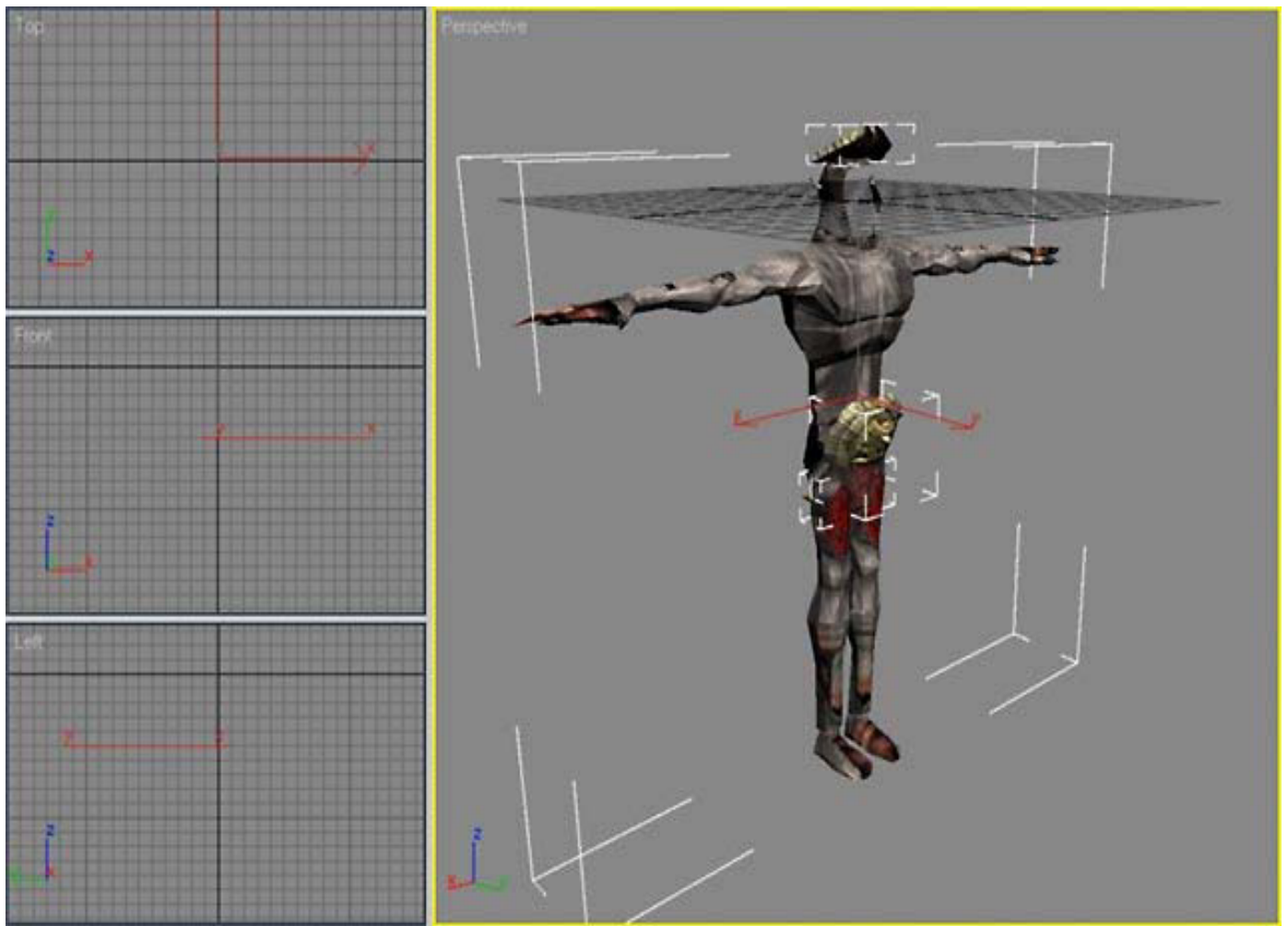
Importing the File

We're going to use our old friend Dagoth Ur to make a head for a playable race.

Find the .nif file you want and copy it and all the textures it uses to a working folder. Keep the textures in the same folder so Max will find them right off.



Open Max and import your .nif.

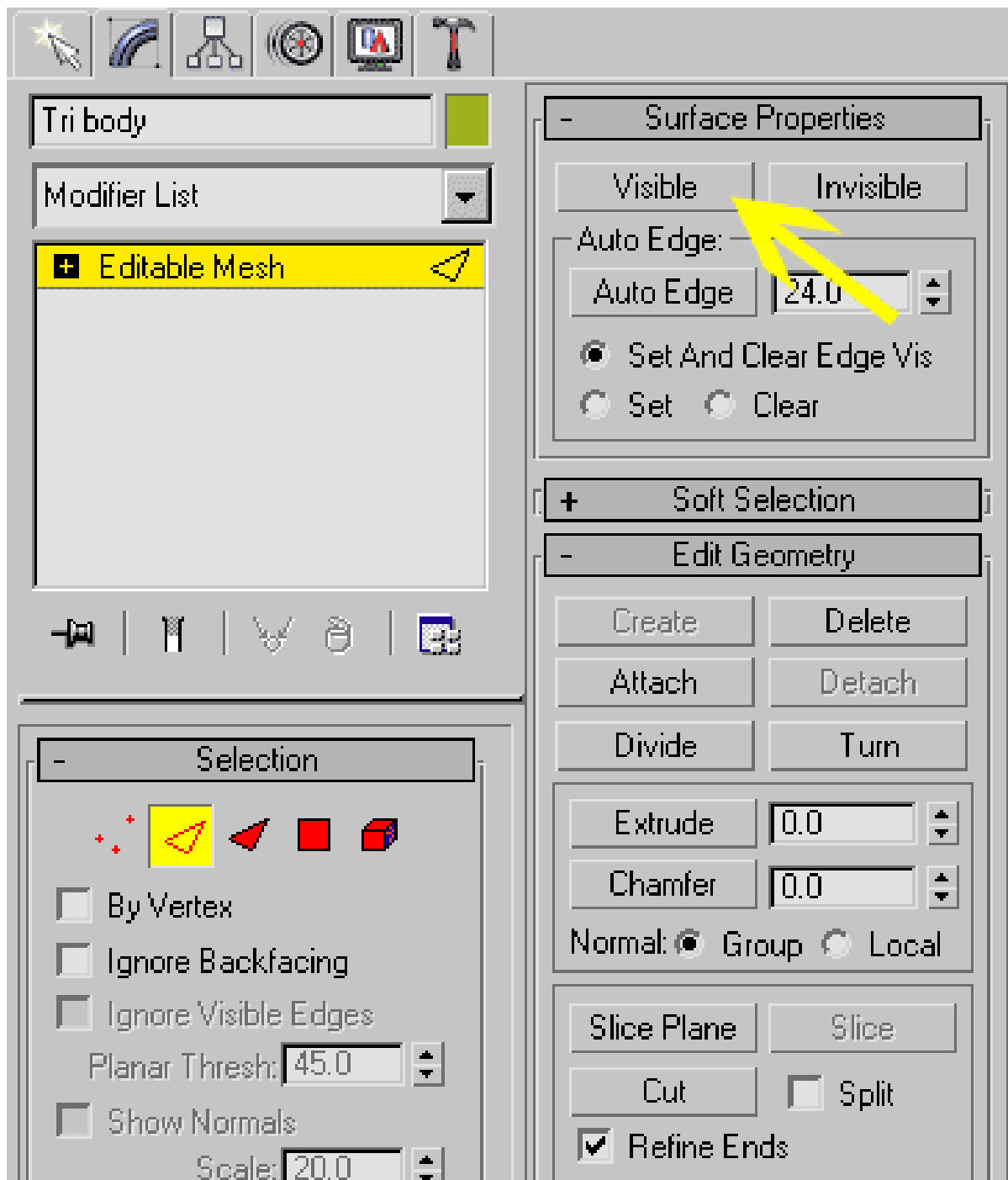


There he is, more or less.

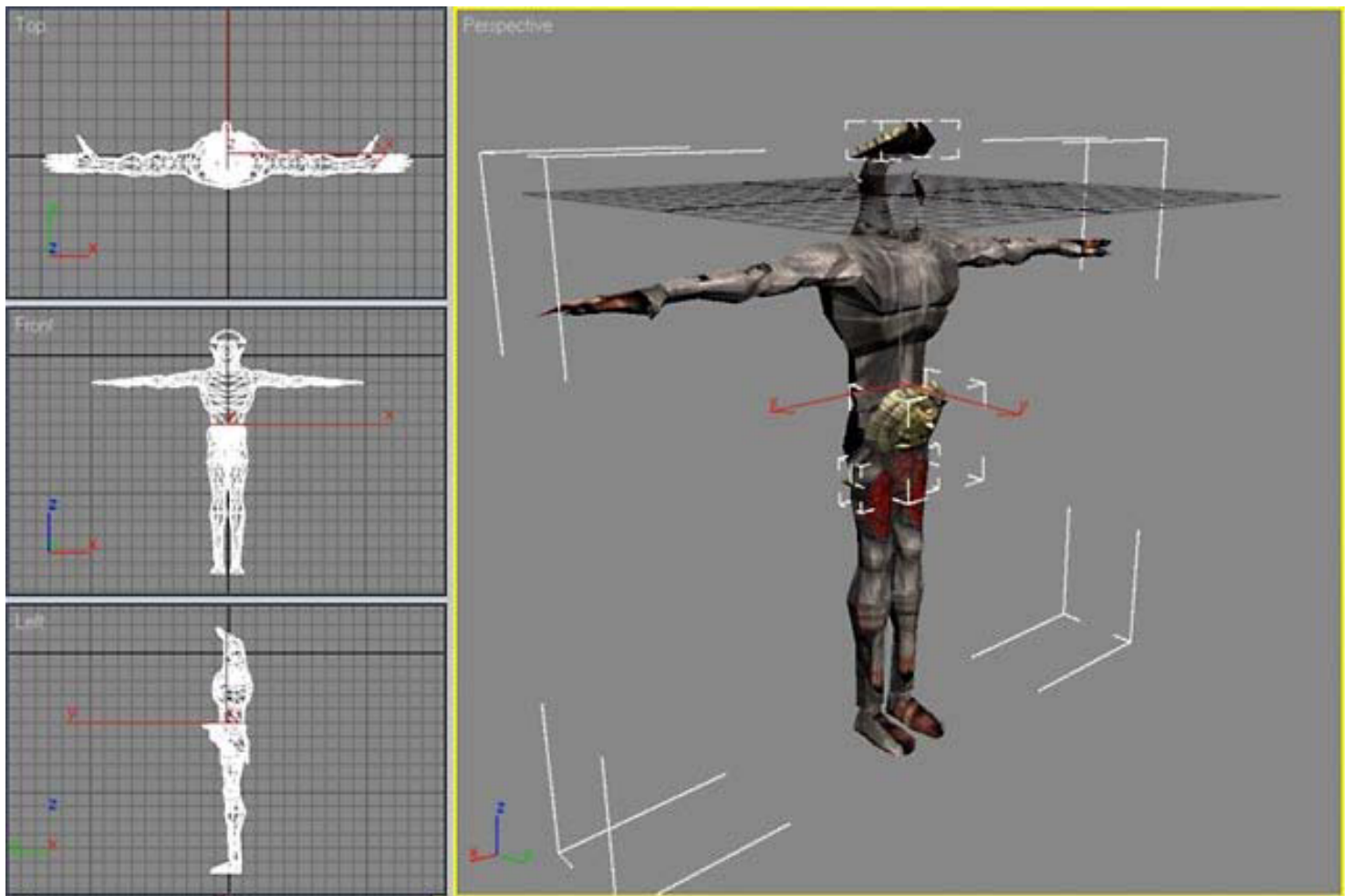
Visibility and Positioning

There are several problems we need to correct right off. Positioning and visibility are the most obvious.

You'll notice the mesh is visible in the perspective viewport, but not the other three. We need to make the edges visible. Select the mesh, enable edge selection, drag your mouse across the perspective viewport to select all the edges, and click "Visible" under "Surface Properties".

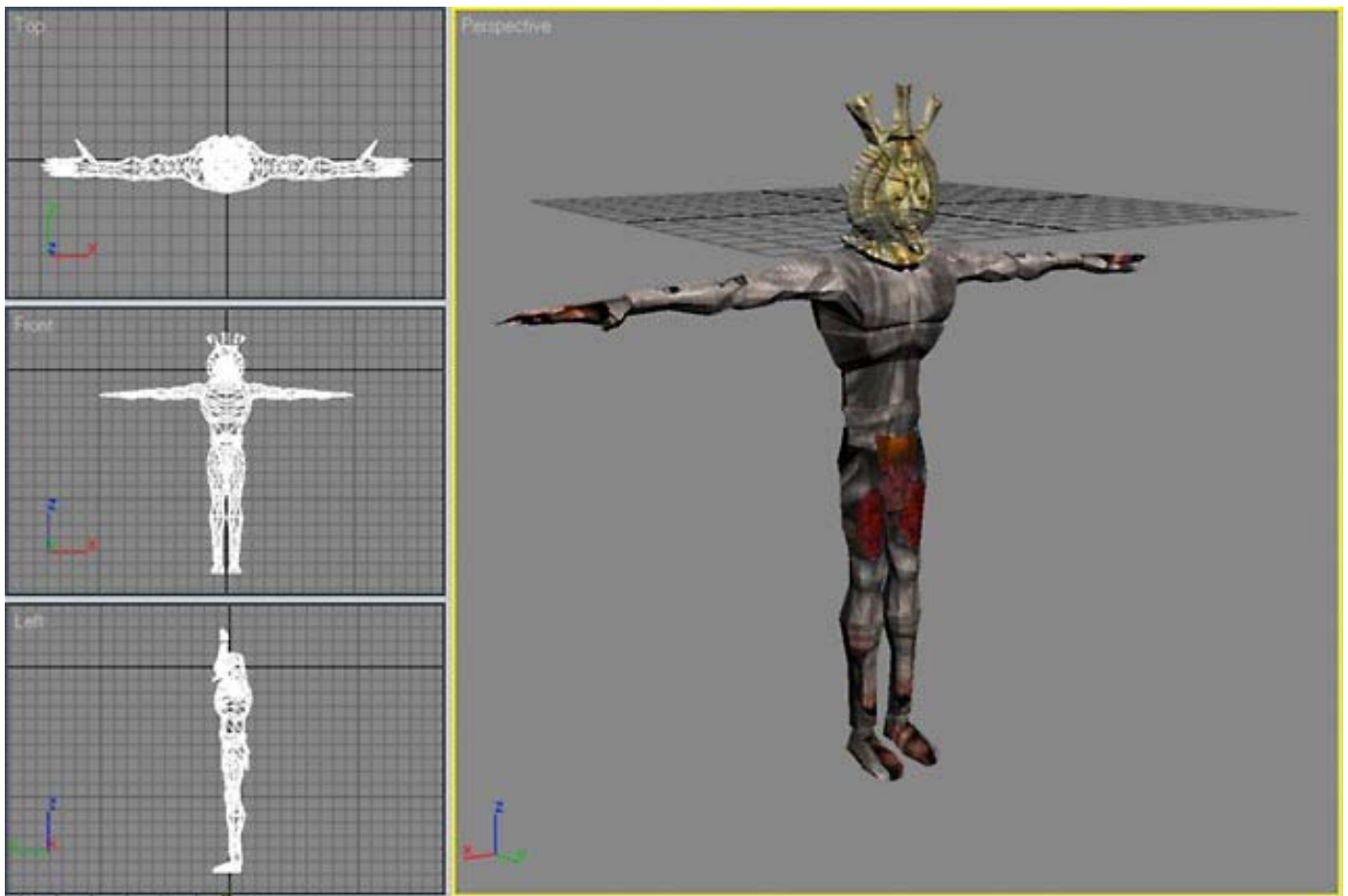


If your mesh is in separate parts, as here, do this for each one. Be sure to deactivate edge selection when done, this can cause problems with texture mapping later.

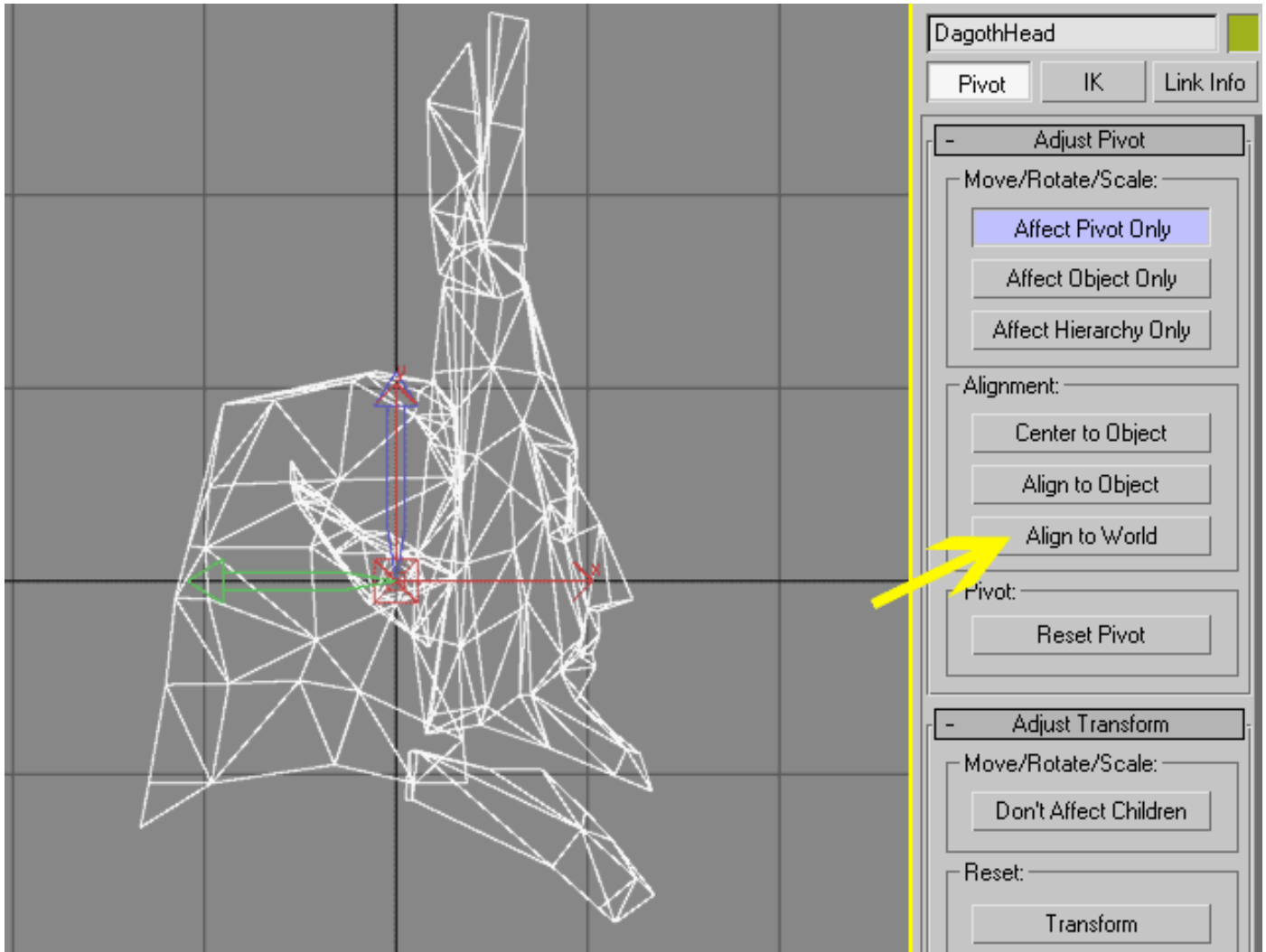


We can now see Mr. Ur in all four viewports.

There are also some positioning errors. Most obvious is the face. No one ever accused Old Dagoth of thinking with his head, rather than his groin, but we should still fix that for him. Simply select and move the meshes around. Use the preview mode of the TES:CS as a guide if you're unsure what goes where.



Since I only want the head I'm going to cut the polys I don't want and position the mesh so it gets placed correctly in-game. A head needs the pivot point at 0, 0, 0, which is a good starting place for any mesh. You'll need to do some experimenting exporting .nifs and checking them in-game. Make sure you select your pivots and align them to the world.



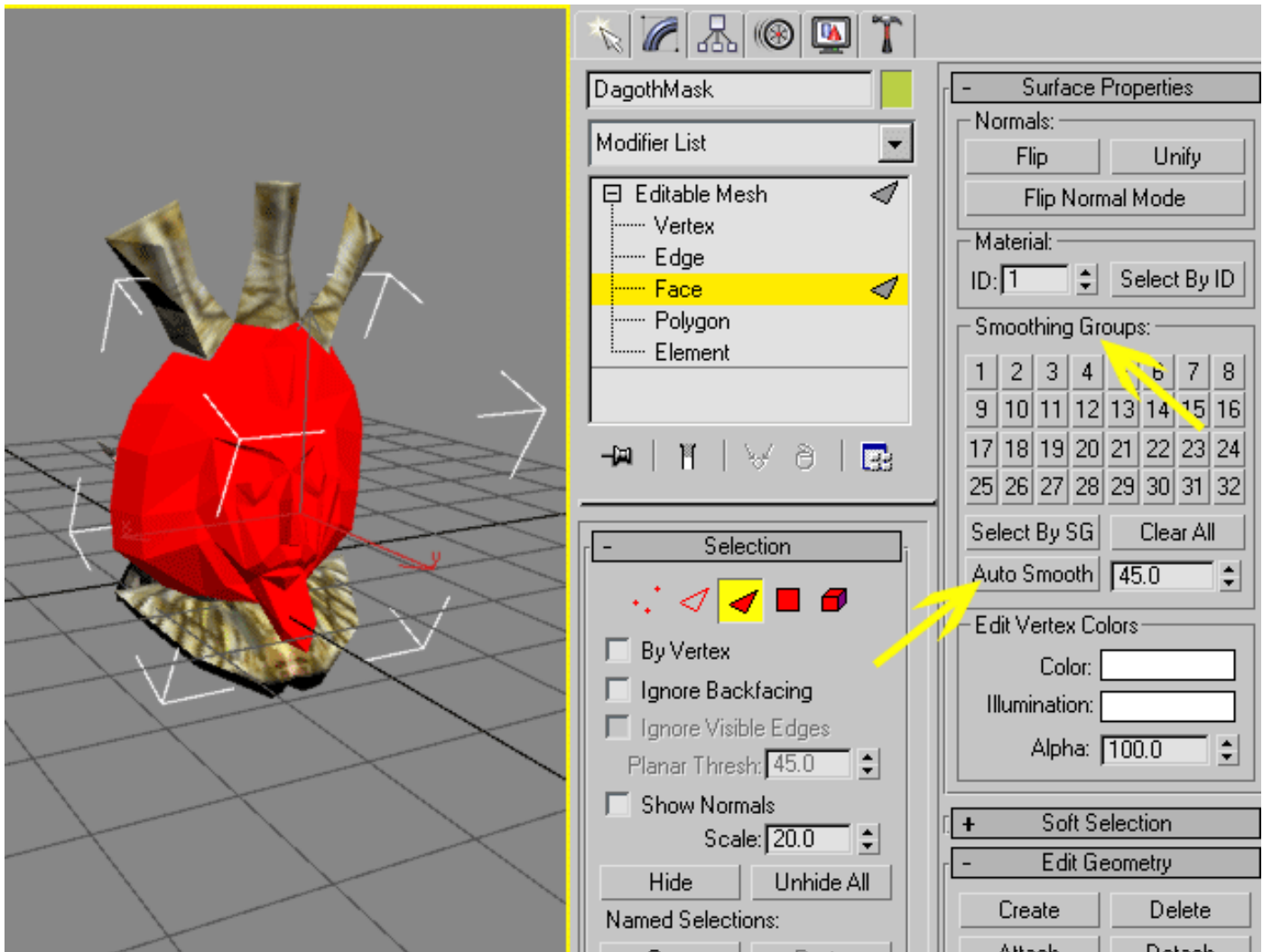
Textures and Smoothing

Now lets export a .nif and have a look in-game to better illustrate some more problems the importer causes.



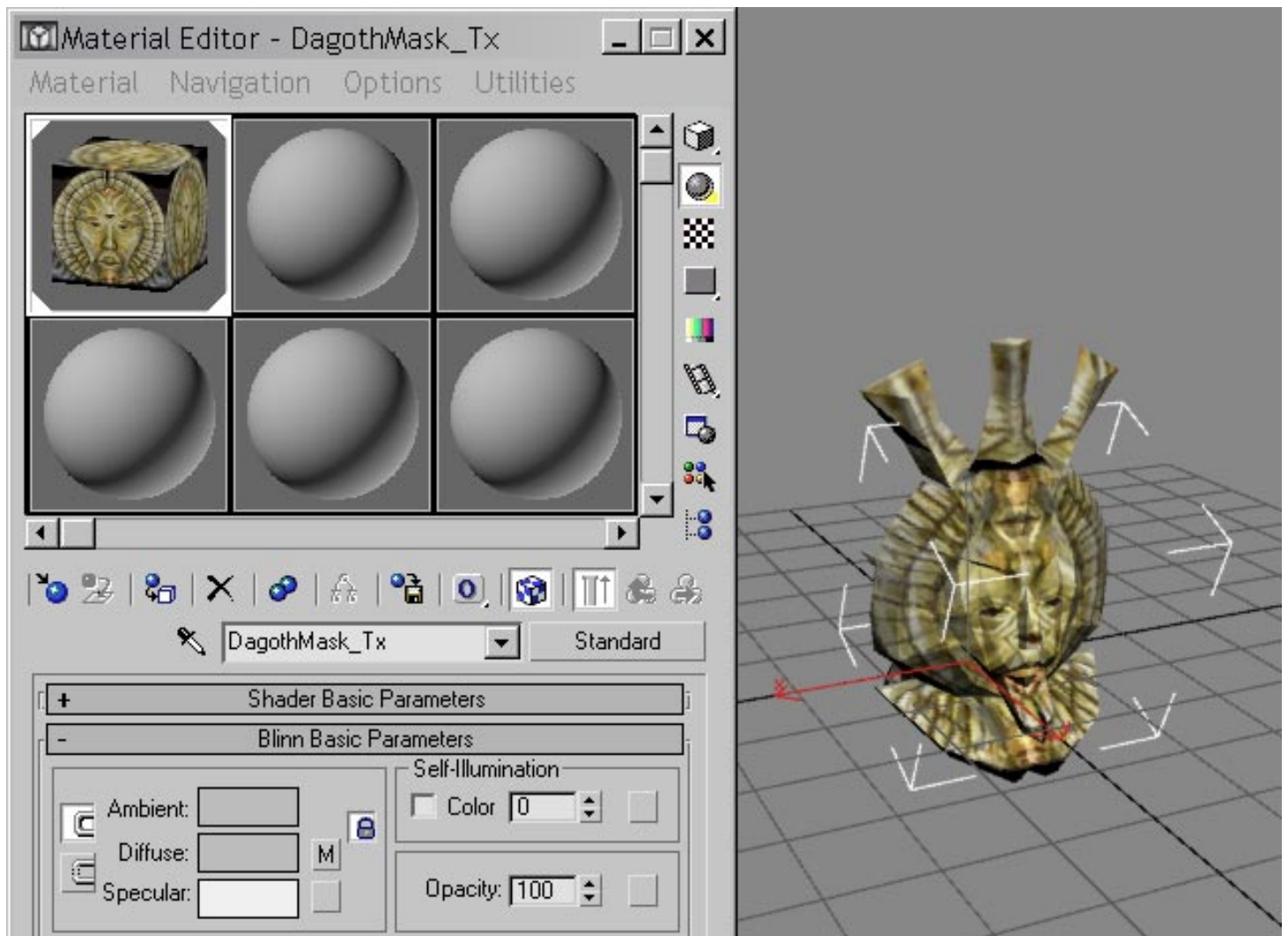
I've added a new playable head for the Dark Elf race, and gone back and forth a few times adjusting the positioning. Now we can see that the textures are incorrectly placed, and have a purple tint in the shadows. Our mesh also looks blocky, where you can see the polygon edges.

Smoothing will blend the textures across the polygon edges, making a rounded object appear smooth. Squared off meshes won't need this, but organic shapes will.

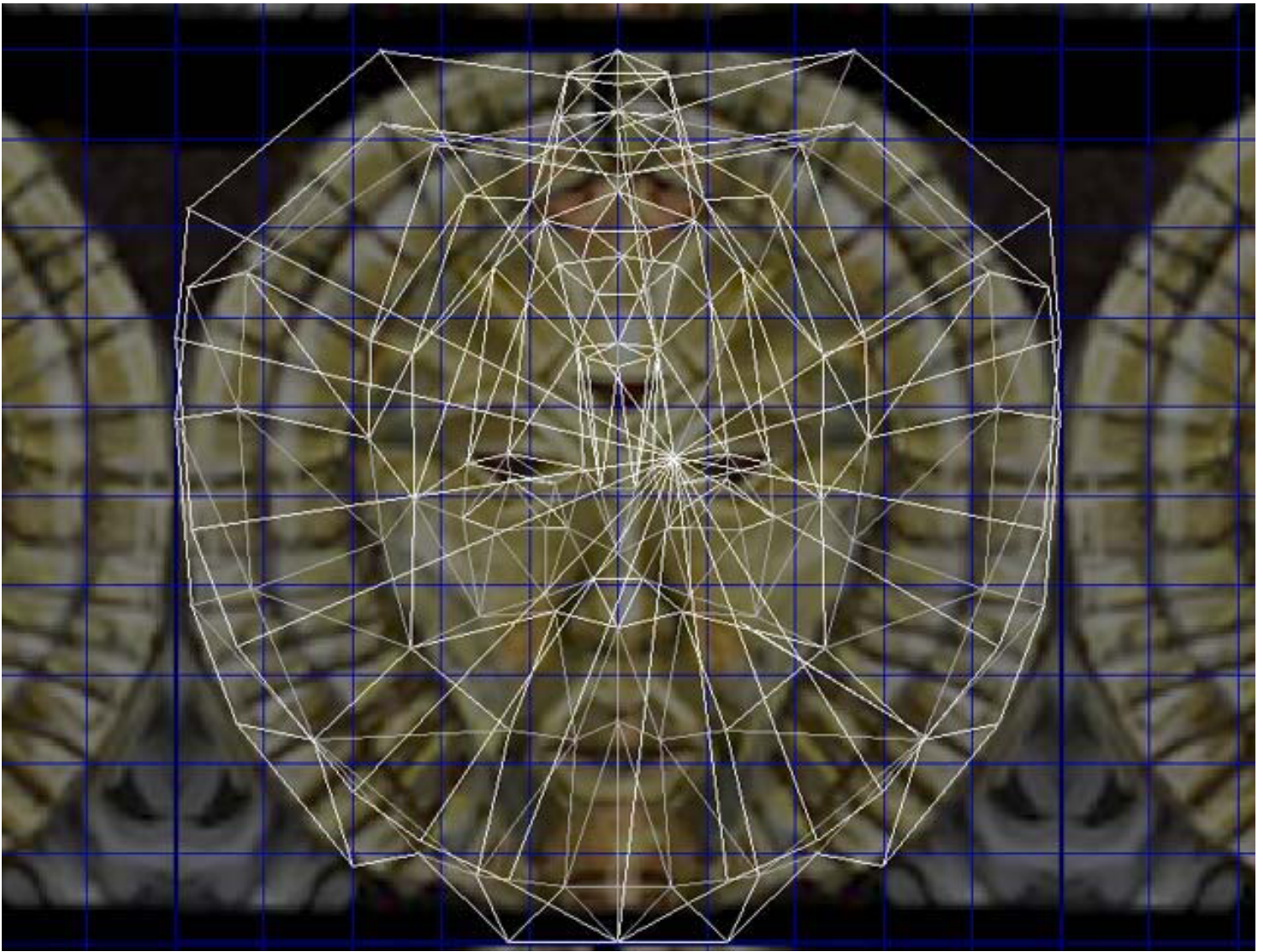


Any existing smoothing will be lost by the importer. To add smoothing back; activate face selection for your mesh, and drag to select all the faces. Under "Surface Properties" you can either hit "Auto Smooth" or select faces to add to smoothing groups. Again, do this for all the meshes, and be sure to deactivate face selection for the next step.

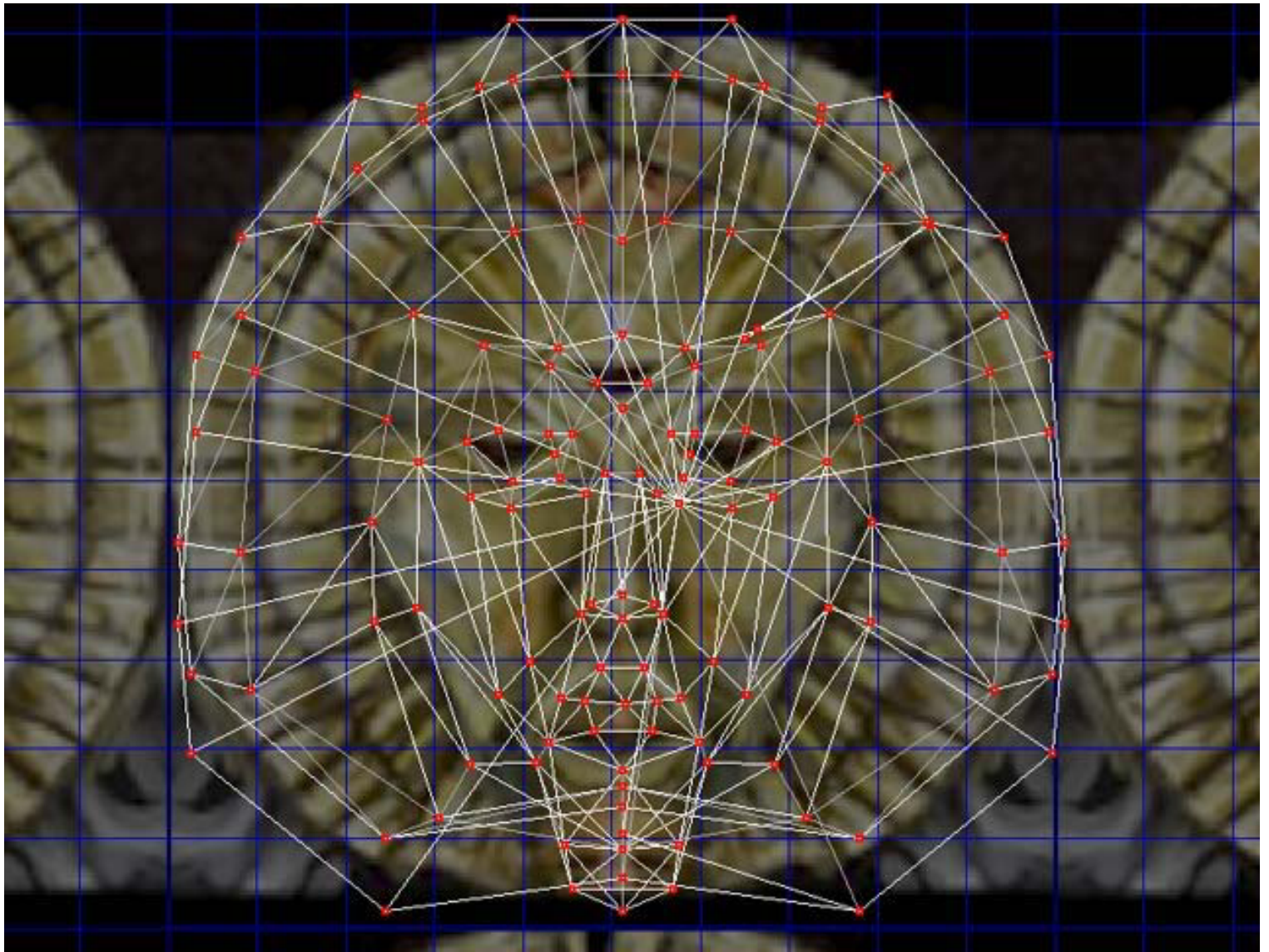
The importer likes to add the purple tint we saw in-game, and messes up UVW mapping. To remove the tint; simply add a new material using the original texture as a map and apply it to the mesh. Make sure the ambient, diffuse, and specular colors are neutral. The purple tint will be gone in-game.

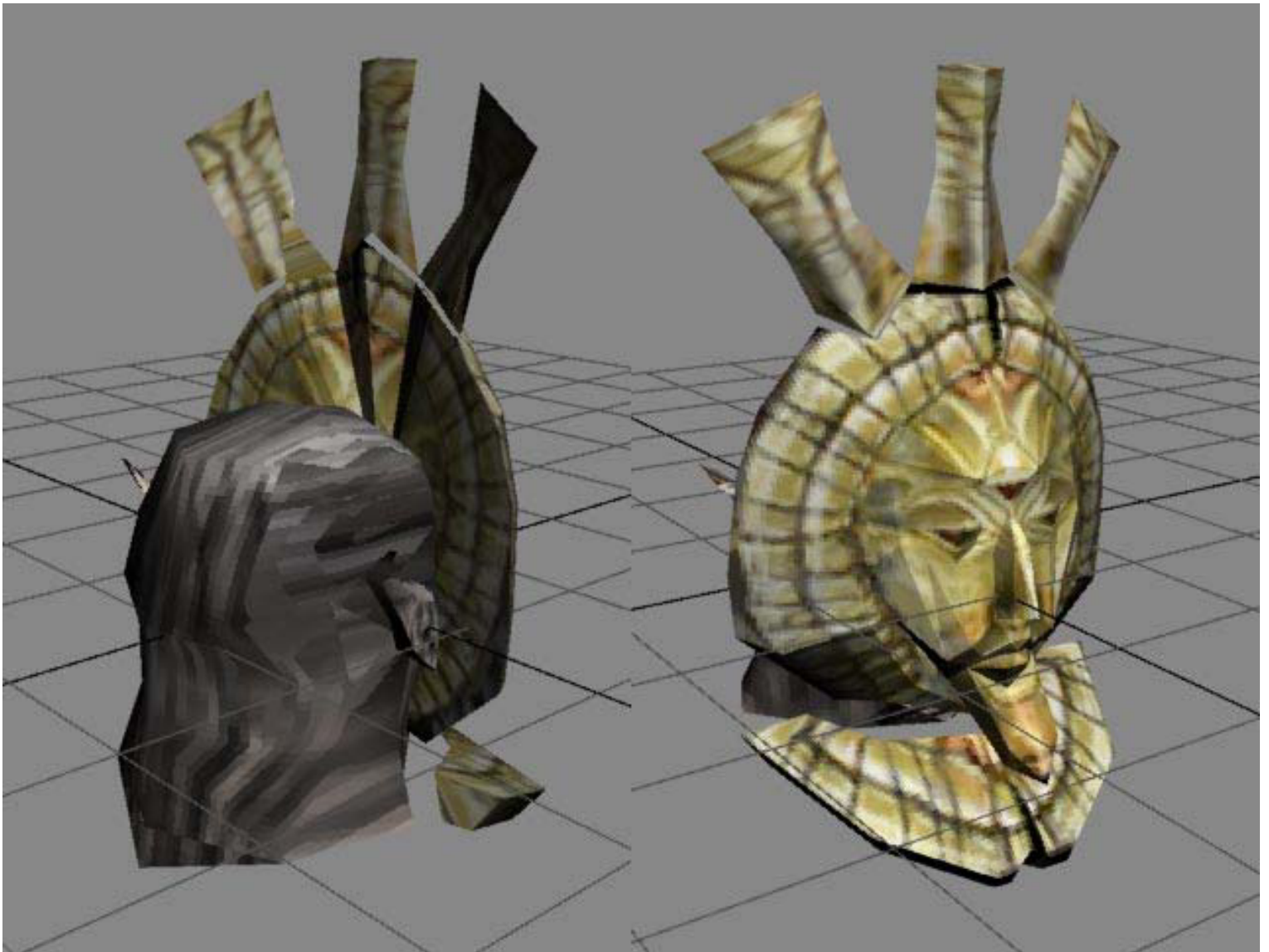


Texture mapping is messed up by the importer, but not totally lost. Add a UVW Unwrap modifier and go to the UVW edit window.



I've found mirroring the map horizontally and rotating 180 degrees will usually put it back in the correct orientation. A little hand positioning is needed after that. Try and pick out an ear, or an eye, as a guide to getting the polys lined up right.





That's about it. Most every import has the same issues, so once you get the routine down it's a fairly simple process. Lets check our new head one more time in-game.



And there we are, ready to spread ash and blight across all of Seyda Neen!

Tutorial by dongle, 6/12/2003