miro42's

Adding Geometry to Heads Tutorial

For **KOTOR** and **TSL**

This is my second tutorial ever as well as my second tutorial on heads. This time around I'll be teaching you to add geometry so if your heart desires you can make more Zabraks or even a Kissai (like my Naga Sadow mod), for example. I'll be using both, a Zabrak I created for KOTOR and Naga Sadow for TSL, as both processes, while similar, have some major differences in hex editing. This tutorial will assume you know nothing about KOTOR modding. While this tutorial assumes you know nothing of KOTOR modding, it will assume you have knowledge of the tools listed below.

WARNING: This tutorial while a basis for which you can add geometry to heads is by no means all inclusive. Not all heads react the same way to what I will show you, and you may experience hair pulling and/or eye gouging when things continuously go awry (which they probably will). But patience is key, and eventually you will (hopefully) get your model to run.

Tools and Programs you will need:
KOTOR and/or TSL
kotor tool
mdlops 0.6 (others might work, but this is what I use)
3dsMax or GMax (I use 3ds but I'm pretty sure for our purposes it doesn't matter)
NWMax
Photoshop (for textures, which I will not cover)
Hex Workshop (or any hex editor such as the free Notepad+ or XVI32. Hex Workshop costs money, but it is the only one I've found that can do file to file comparisons as well as copy and paste function. So it's a luxury item)

//kotor tool (Figure 1)

+Kotor II
 +BIFs
  +models
   +Aurora Model
    -pmhb10.mdl ==**extract**
   +Aurora Model Extension
    -pmhb10.mdx ==**extract**
 +ERFs
  +TexturePacks
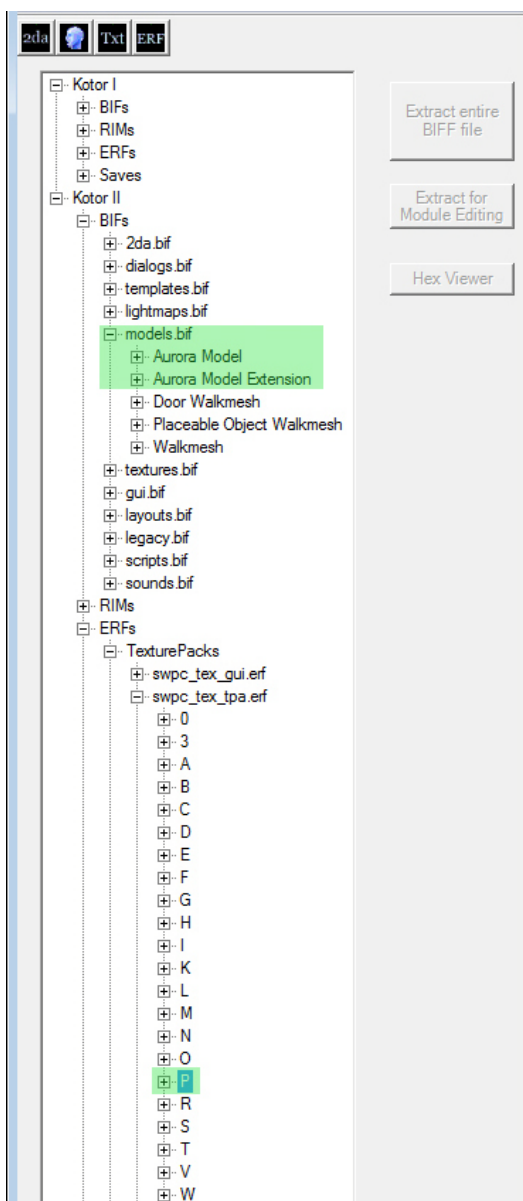   +swpc_tex_tpa.erf
    +P
     -pmhb10.tpc ==**extract as .tga**

Figure 1

//mdlops (Figure 2)

select Kotor 2 (or Kotor 1 as applicable)
click select file and navigate to pmhb10.mdl
///I leave extract animations checked but I don't think it matters
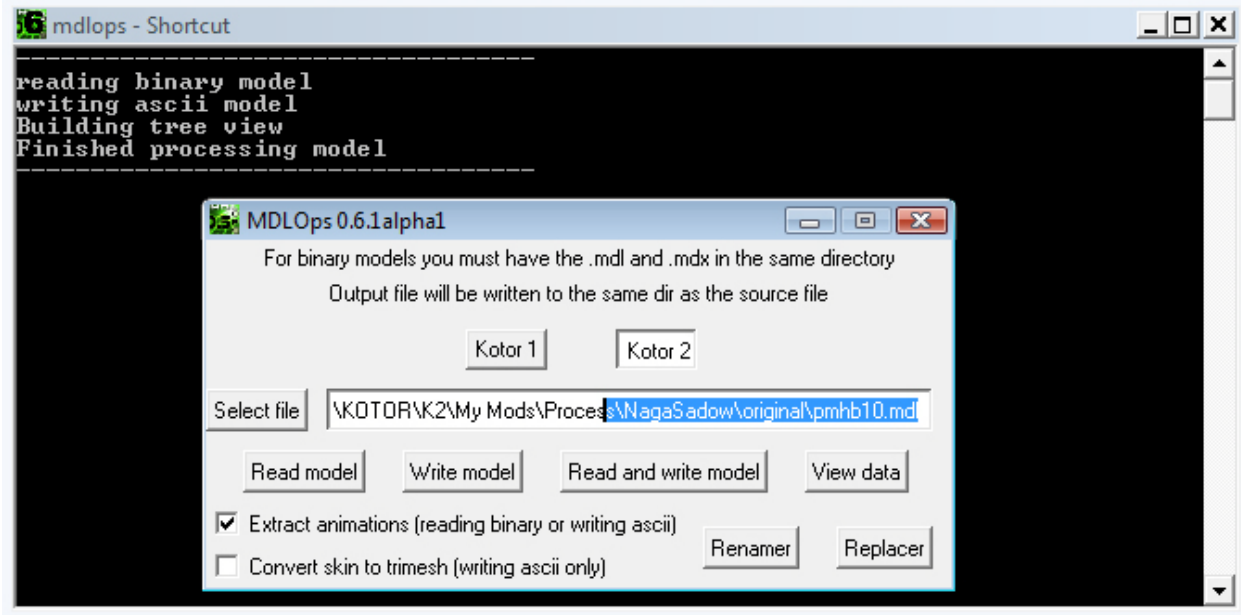click Read and write model ==this produces pmhb10-ascii.mdl

//NWMax (Figure 3)

+MDL Loading
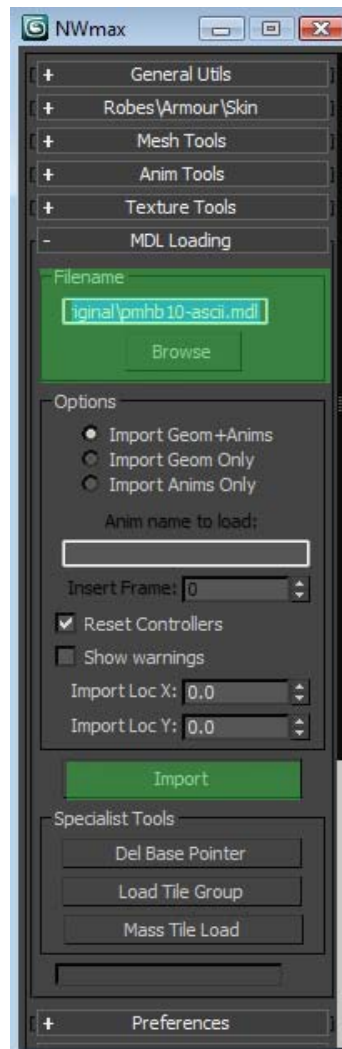 click browse and locate pmhb10-ascii.mdl
 click Import

//3dsMax

create your added geometry (in this case Sadow's tendrils and goatee) **(Figure 4)**

Figure 4

select the head
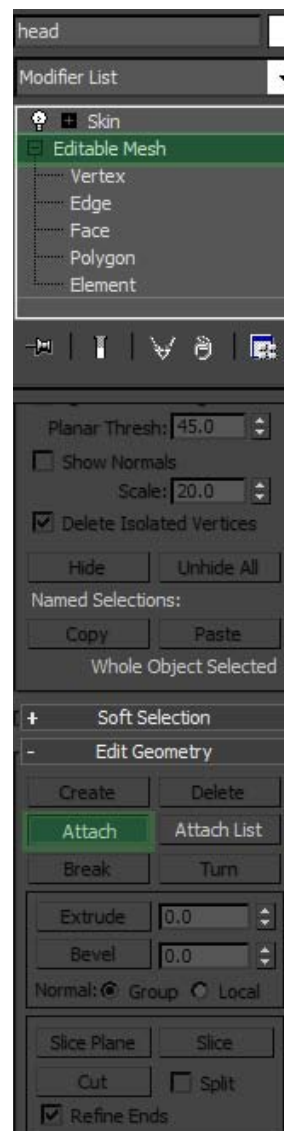while in Editable Mesh mode click on Attach
(Figure 5)

Figure 5

select the two tendrils and the goatee
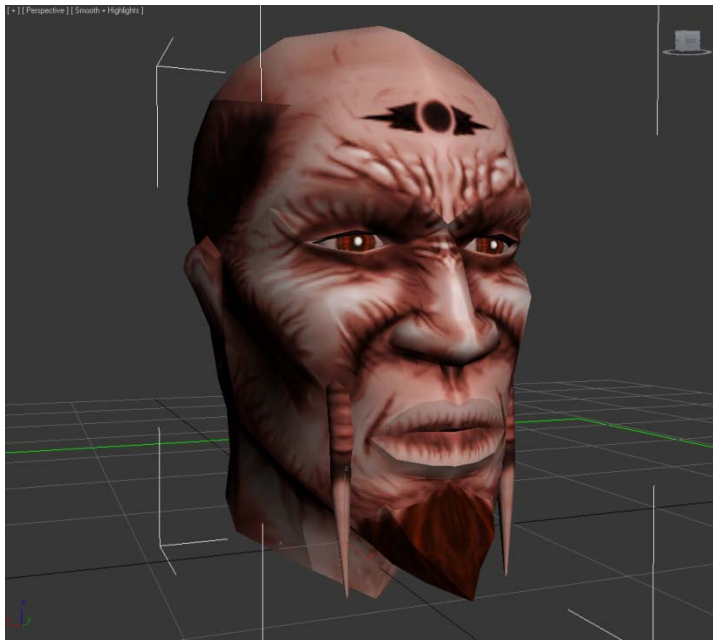now the added geometry is part of the head geometry **(Figure 6)**

Figure 6

select the AuroraBase
browse to an extraction directory
WARNING: when you extract, it will overwrite any file of the same name so be sure you have a back up
of the original .mdl
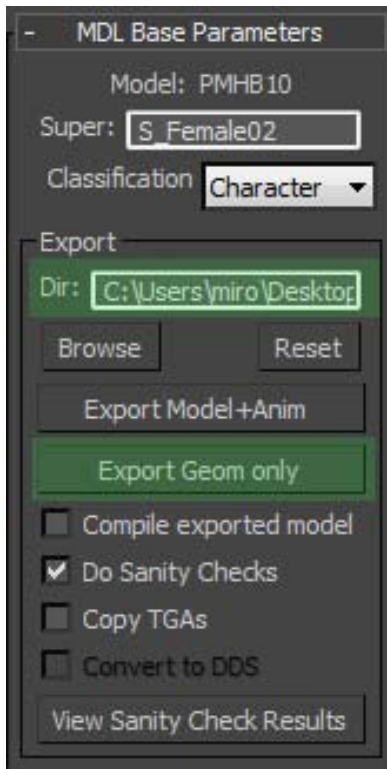click Export Geom only **(Figure 7)**

Figure 7

//mdlops (Figure 8)

///before you continue you will need to rename your newly exported ascii file. I always just add a z on the end. Now have your original .mdl and .mdx in the same folder as the z file and continue
with Kotor 2 still selected click on select file
navigate to the z file
uncheck Extract animations
click Read and write model. This produces two new files pmhb10z- k2-bin.mdl and pmhb10z-k2-bin.mdx
NOTE: if mdlops doesn't produce the Done reading ascii model: pmhb10z then you probably don't have the original .mdl/.mdx files in the same directory
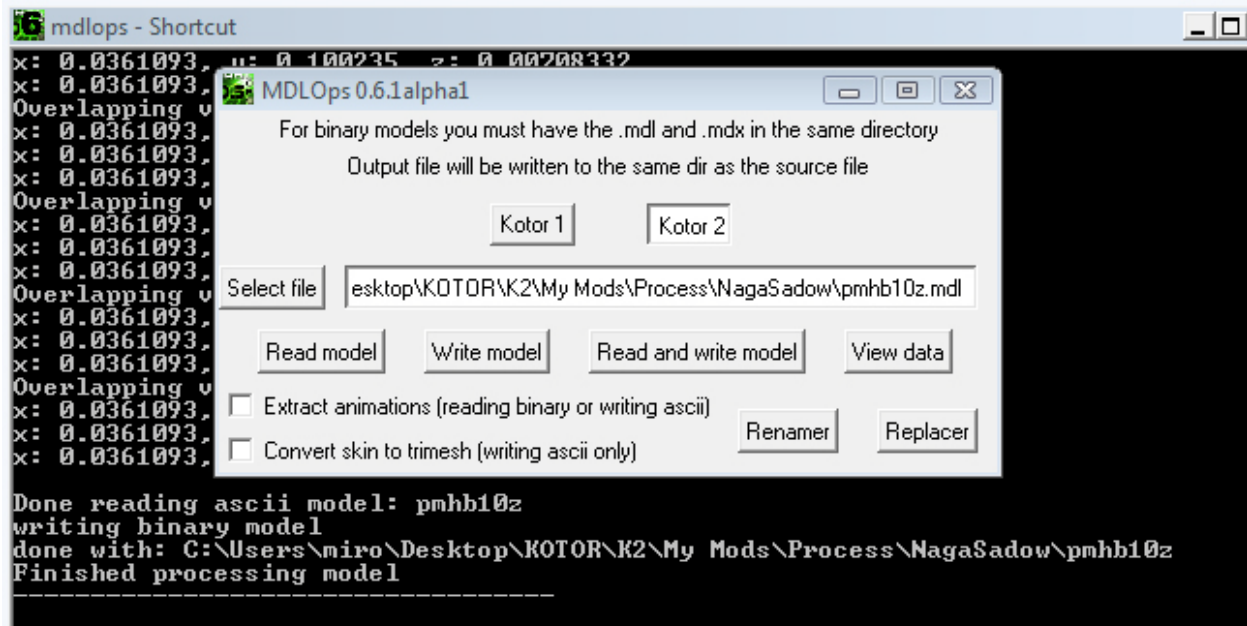

Figure 8

now copy these two files into your Override
rename them to just plain old pmhb10.mdl/.mdx

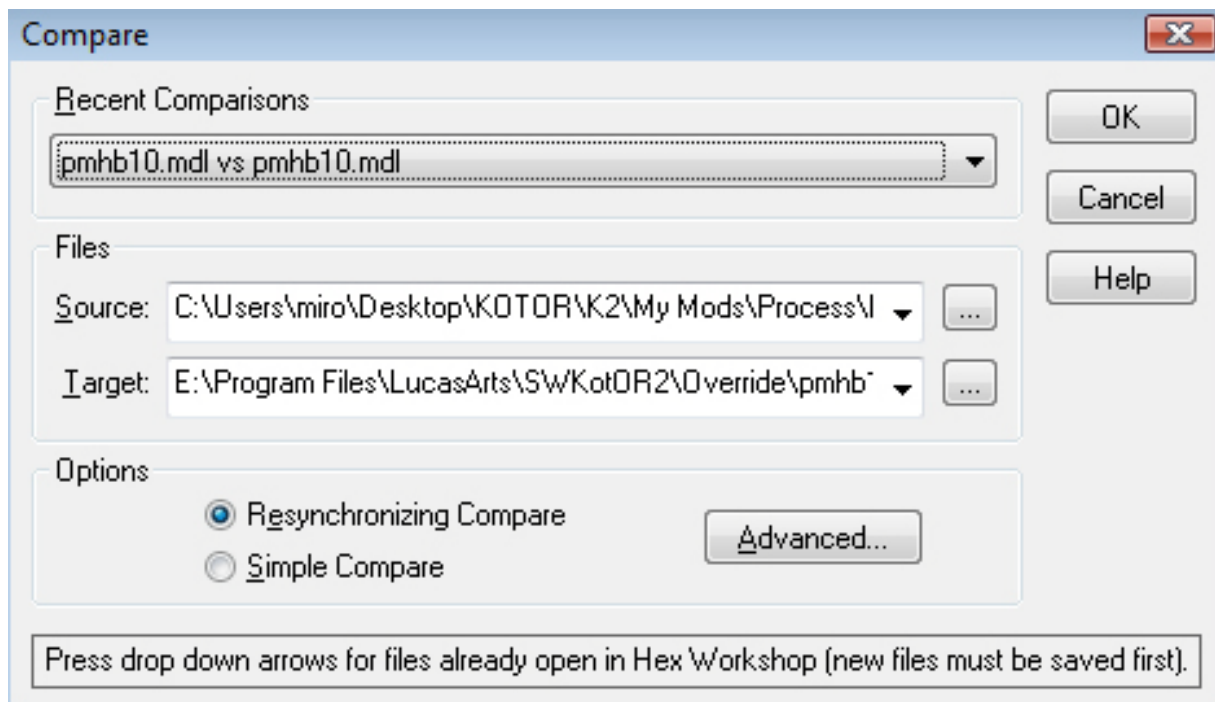**//Hex Workshop**

hit ctrl+k to bring up a comparison

Figure 9

select source and navigate to your original .mdl
select target and navigate to your Override .mdl
click OK **(Figure 9)**
//this could take ages or it might be a few seconds. Just let it ride

///this next part is better explained in screenshots
///this next part is also where things can get tricky and frustrating

select the right segment of hexes from the old .mdl and replace them in the new .mdl
save and click yes when it asks you to create a .bak (this will make things a lot easier when you mess up and have to revert to the old file)
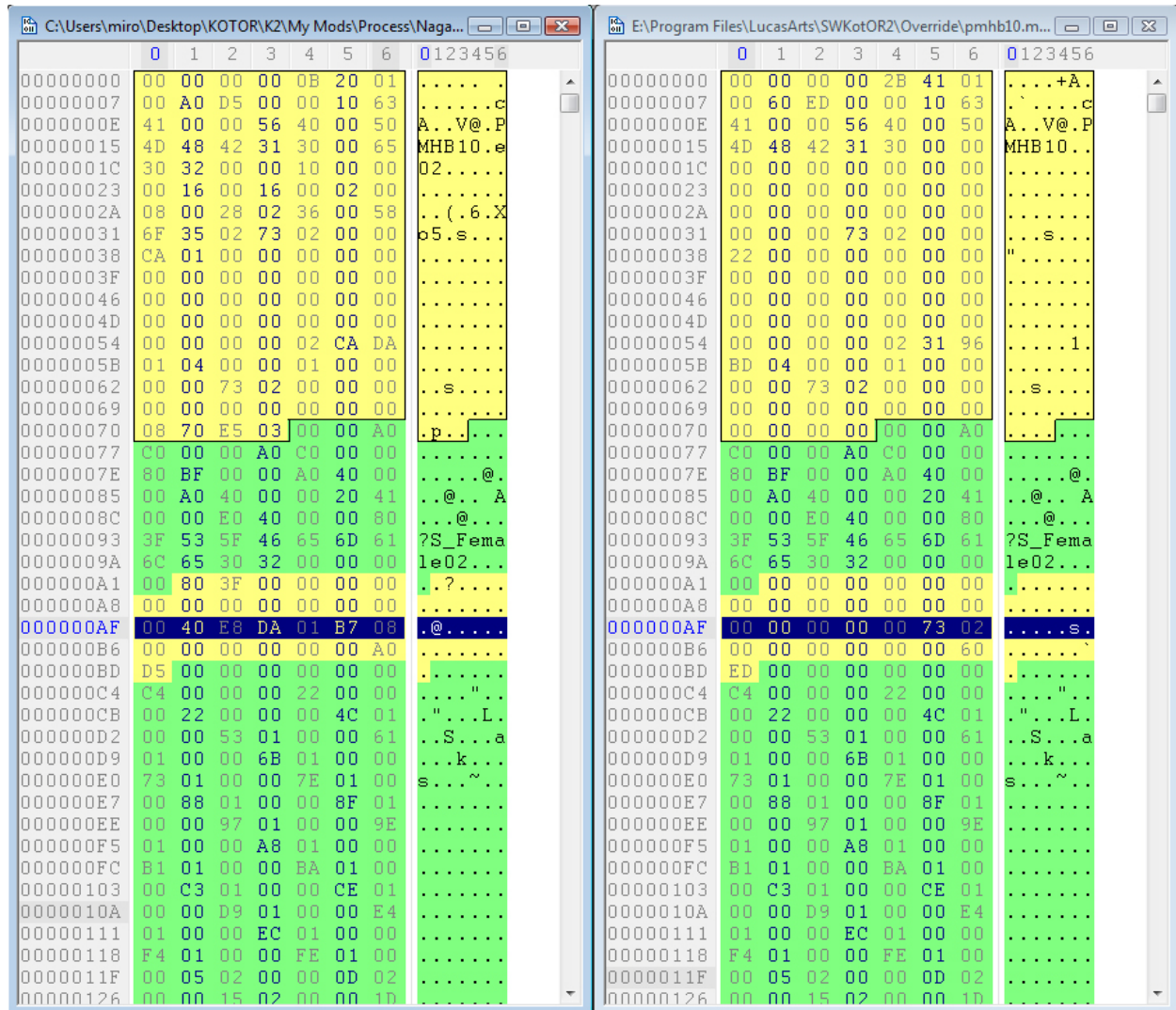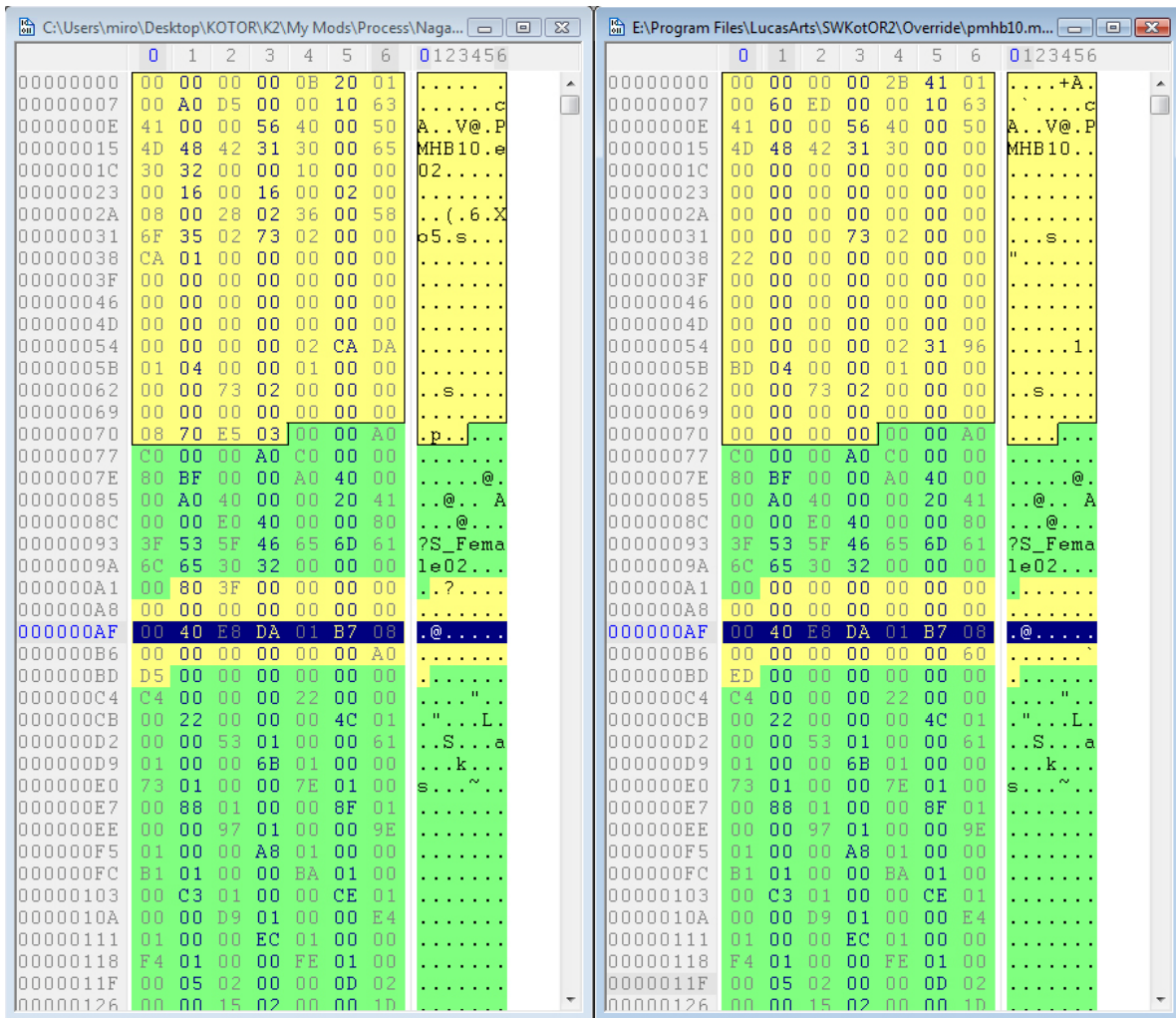
NOTE:

Figure 10 - Before Changing

Figure 11 - After Changing

start up TSL and you'll be able to see your handiwork in just a few seconds **(Figure 12)**. Then if things don't work right you can commence tearing your hair out and gouging out your eyes as it will save you time in the future
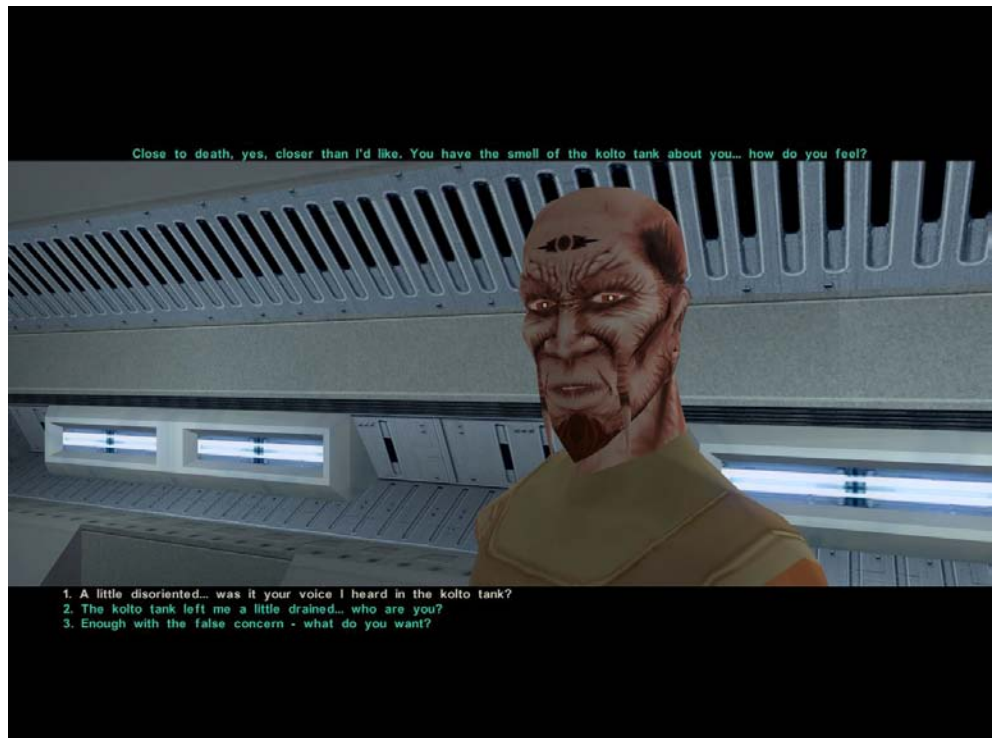

Figure 12

here comes the annoying part: head files are different, not only from KOTOR to TSL put also from head to head in the game. These three lines in TSL **(Figure 13)** seem to be the key, so work with them, trying out different hex edits to find the right one.
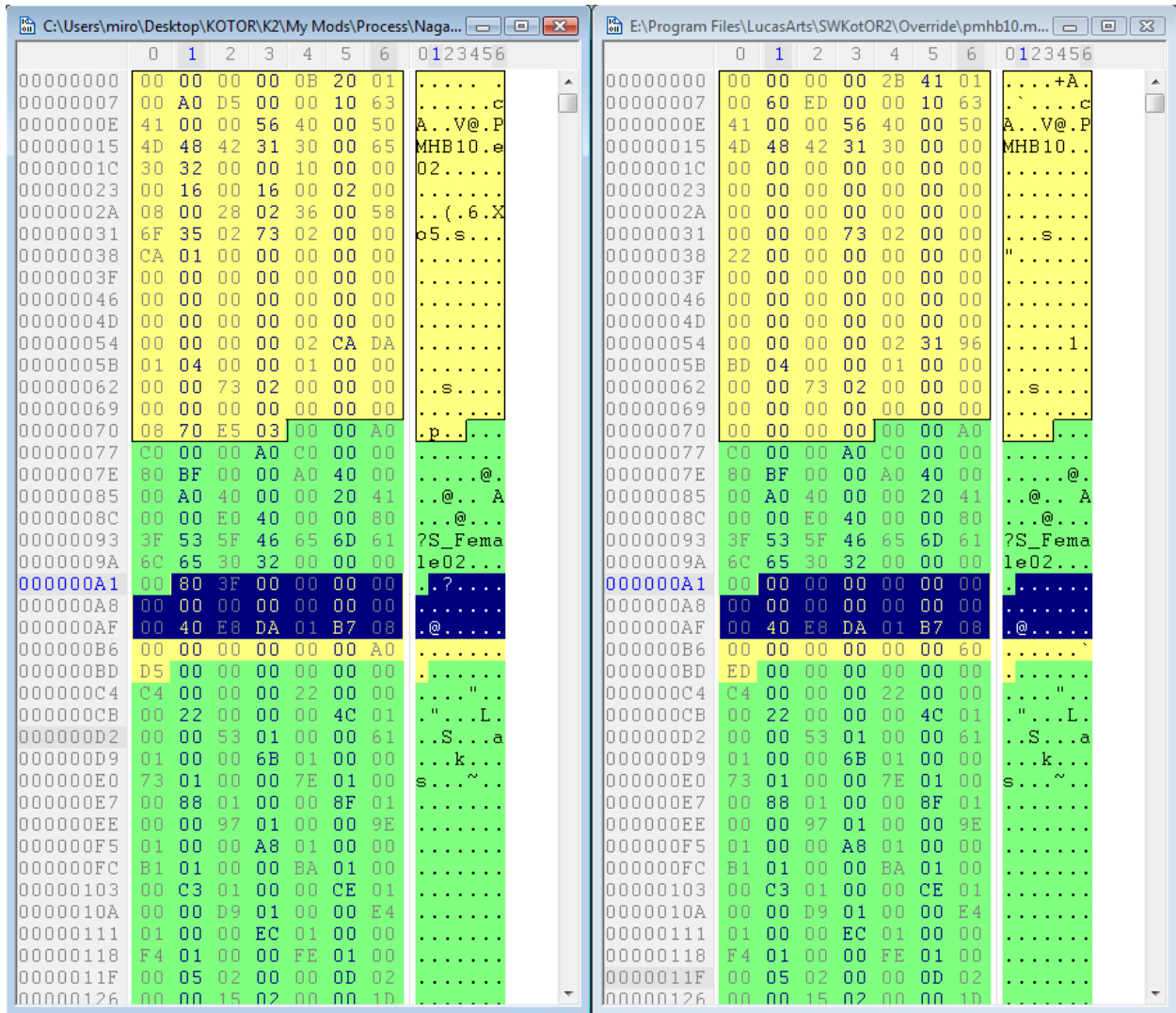

Figure 13

to show you the difference in KOTOR here is what I did with pmha03 to create a Zabrak **(Figure 14 & 15)**
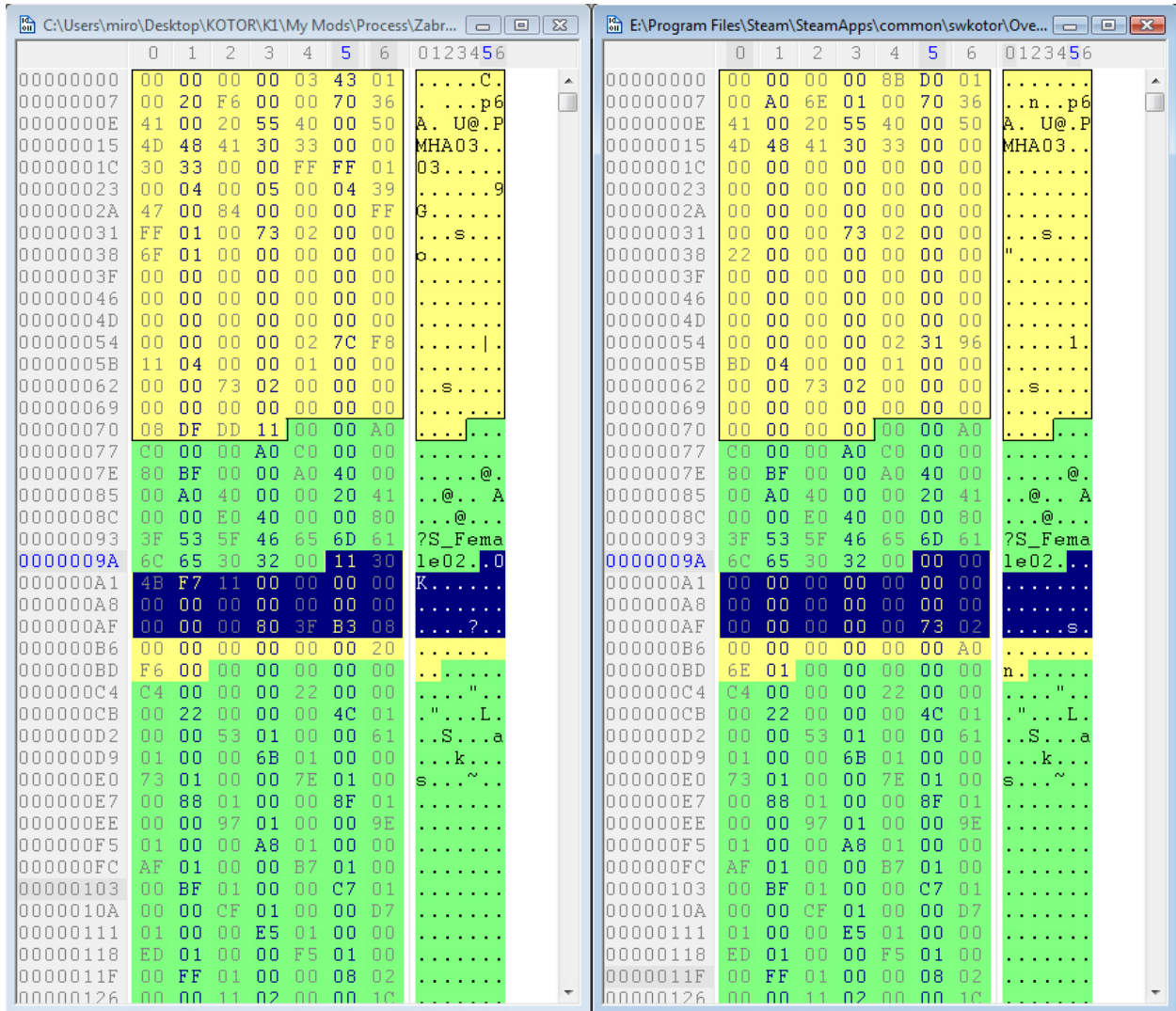

Figure 14

while similar and even sharing a few similar hexes what works for KOTOR doesn't always work for TSL. The bright side is that in KOTOR the four lines above seem to be the key factor in getting it to work
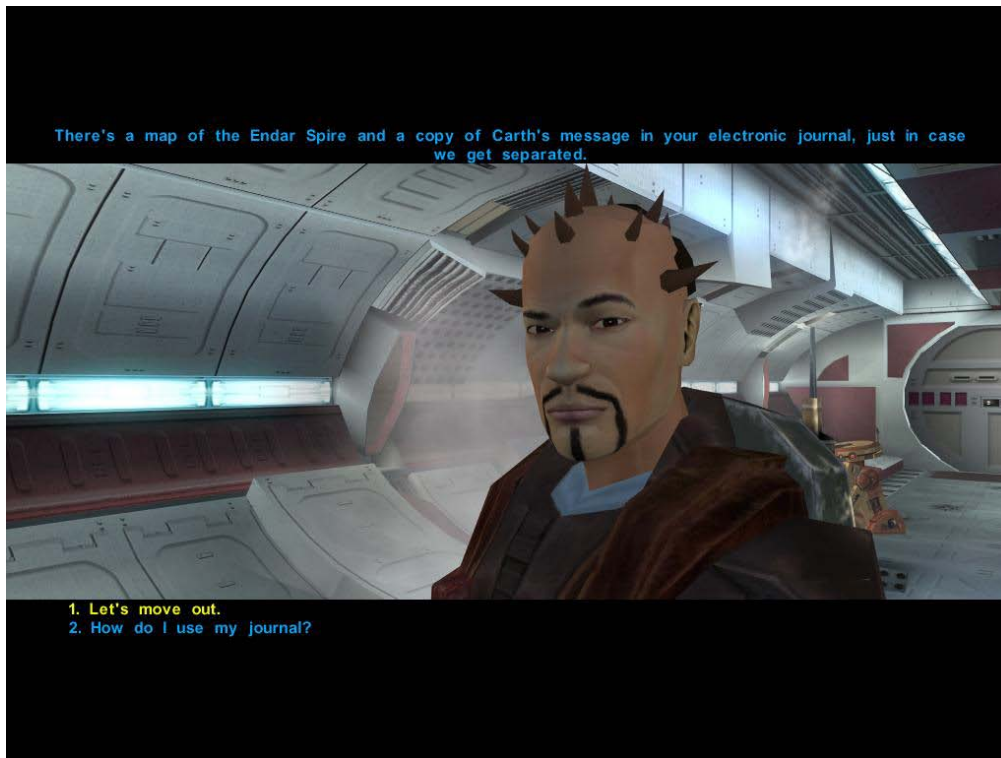
Figure 15

I hope you've enjoyed this tutorial and have fun with modding!

-miro42

Acknowledgments: None of this could have been done without the initial thread by settoken found here: http://www.lucasforums.com/showthread.php?t=188885 and then Quanon's pseudo tutorial.